

A Briefing Paper for Parliamentarians on the Design Faults at the Heart of English Education

Executive Summary and Full Text

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THIS PAPER is based on the argument contained in the book *Overschooled but Undereducated*, to be published in November 2009 by Continuum of which it has already been said:

“I read this book with great interest and almost entire agreement.” SIR ERIC ANDERSON, FORMER PROVOST OF ETON COLLEGE

“This remarkable work ... deserves the widest possible readership. It is ... profoundly scholarly and eminently accessible ... nothing less than a tour de force, and it is a privilege to recommend it unreservedly.” SIR GUSTAV NOSSAL, FORMER PRESIDENT, AUSTRALIAN ACADEMY OF SCIENCES AND FELLOW OF THE ROYAL SOCIETY

“This is an important book; at its heart lies a challenge to government to build its policies on evidence and scientific advances, particularly about the development of the brain, and its implications for adolescence.” DR. KEITH ROBINSON, CHAIRMAN OF THE ASSOCIATION OF COUNTY CHIEF EXECUTIVES

OF ALL THE STATEMENTS made in the English language about education, it is probably the thirty words written by John Milton, the poet and philosopher, nearly 400 years ago in the middle of the English Civil War, that best exemplifies a people's highest aspiration for their children.

"I call therefore a complete and generous education that which fits a man to perform justly, skilfully and magnanimously, all the offices both public and private, of peace and war."

This Briefing Paper analyses the current difficulties of English education in the light of such an aspiration.

Executive Summary

The basic function of education in all societies and at all times is to prepare the younger generation for the kind of adult life which that society values, and wishes to perpetuate.

Those values change over time so that the present structure of English education is a result of numerous decisions taken in times past by educationalists and politicians as they reacted to social and economic environments very different to today. Those earlier decisions were coloured by the philosophic, religious and psychological understandings of past generations about how people behave, how intelligence is created, and how those in power thought society should be shaped.

Contemporary research in the bio-medical, social and cognitive sciences into the

relationship between innate human nature, and socially-constructed nurture, shows how misinformed and inadequate were many of those earlier decisions. Unfortunately, so deeply entrenched have these assumptions become that, given Parliamentarians' pressure to find solutions to urgent and current problems, few policy makers have the time (or the depth of knowledge) to question the validity of such 'foundational' assumptions. They fail to question whether such assumptions are rock-solid eternal truths or shifting sands that compensate for their lack of substance by their sheer bulk.

Which raises the key question – does contemporary educational policy simply react to symptoms, whilst failing to address underlying design faults? If the answer is "yes," how can future policy avoid such faults and build its programmes on firmer foundations?

The truism is stark – those who fail to understand their history simply live to make the same mistakes again. Unravelling the relationship of nature to nurture, and then coming to terms with those misunderstandings from the past that colour contemporary judgements, is not easy. Yet to fail to do this is to undermine new policies, and perpetuate under-performance.

No Smoke Without Fire

BEFORE STUDYING this paper it would help Parliamentarians to take time to consider some apparently simple questions:

- *Why is schooling split at the age of eleven, and why is it that primary pupils generally enjoy their education, but secondary pupils don't?*
- *Why, if the early years of education are so important, are secondary schools better financed than primary?*
- *Why does England, a country so dependent upon technology, have difficulties in recruiting teachers of science?*
- *Why, if education is so important, aren't teachers held in higher regard?*
- *Why, in a country with a fully-funded public education system, do some 7% of pupils on average attend independent fee-paying schools?*
- *Why, given the significance in earlier generations of adolescence as a "proving ground" for adulthood, does modern society treat adolescence as a problem, not as an opportunity?*
- *Why, if one of the most significant indicators of future success is the quality of home life in the earliest years, are schools now expected to take on ever more of what until recently were the responsibilities of parents?*
- *Why are those aspects of schooling that children enjoy most called extra-curricular, as if they don't matter so much and are only informally offered?*
- *Why are Steiner and Montessori Schools so popular with professional parents?*
- *Why, in a largely secular country, are Faith Schools generally so popular?*

- *Why, unlike those in almost any other country, do schools in England insist that children should wear school uniform?*

Simple as such questions may appear, the explanations are far from obvious. There has been deep dissatisfaction with English education for generations. Many have been the Education Bills passed by Parliament over the years, and still more numerous the specifically commissioned reports on the curriculum, examination system, on reading and numeracy, on the administration of schools, and the training of teachers.

Questioning the purpose of education is an ages-old saga. Amongst the oldest of the readers of this Paper will be some who read the comments of Sir Richard Livingstone, Vice Chancellor of Oxford University writing in 1941: "Our education, like our civilization, is penetrated with an unintelligent utilitarianism, which makes us feel that we ought to be doing something 'useful'; useful subjects are indispensable, but the prior task of education is surely to inspire, to give a sense of values and the power of distinguishing in life, as in lesser things, what is first rate and what is not."

Seventy or so years before the Cambridge Review of Primary Education in February 2009, and Sir Jim Rose's report two months later, Livingstone wrote, "Our problem is that we ignore a vital educational principle, namely that studying a subject of which you have some firsthand knowledge is far easier, far more meaningful, than studying the theory of a subject of which you have no practical experience."

His conclusions on the Sixth Form curriculum, as it was in 1941, are as sharp and precise as were those of the *Tomlinson Report* of 2006: "What an amazing and chaotic thing it is! One subject after another is pressed into this bursting portmanteau which ought to be confined to the necessary clothes for a journey through life, but becomes a wardrobe of bits of costume for any emergency."

The Vice Chancellor went on to conclude: "If the school sends out children with desire for knowledge and some idea of how to acquire and use it, it would

The Future in Education, Cambridge University Press, 1941

have done its work. Too many leave school with the appetite killed and the mind loaded with undigested lumps of information. If a school is unable to teach its pupils to work things out for themselves, it will be unable to teach them anything else of value." As sensible as that comment might sound to a parent or a practicing teacher, the Chief Inspector of Schools in 2001 dismissed it as "absolute poppycock."

That education seems to have got itself into a gigantic muddle is perhaps best illustrated by media reports of the House of Commons Select Committee on Education in early 2009. Under headlines of "Meddling Ministers," it was said: "Ministers have too much control over the national curriculum with schools run as a 'franchise operation' from Whitehall." The committee called for the National Curriculum to be slimmed down and noted that a generation of teachers had been de-skilled and demotivated by the levels of prescription of guidance from central government.

Reforms aimed at making the secondary curriculum less prescriptive have left it "as complex as ever it was." The Report went on to recommend that all schools should follow a national curriculum only in English, Maths, Science and Information and Communication Technology – a freedom currently extended only to the government's flagship Academies.

Schooling was "more dependent on a recipe handed down by government rather than the exercise of professional expertise by teachers," said the MPs. The Committee Chairman commented, "We need a simpler, more coherent curriculum. Four transitions from one key stage to the next create disruptions which damage the educational experience of pupils... we need to trust schools and teachers more and empower teachers to do what they do best."

Sarah McCarthy-Fryer, the Schools Minister, when asked to comment on the Select Committee's findings, said, "we reject utterly the claim that schooling is some 'franchise operation' run by Ministers – and it is frankly disappointing that this Report perpetuated the myth that Whitehall is determined to wield an iron grip on every minute of every day in every classroom."

So what has been going on if, after seventy years, those highly pertinent and anything but complex observations made by such an illustrious academic as Sir Richard Livingstone, could have had so little effect?

This is what this Briefing Paper seeks to explain for the benefit of those Members and Ministers who are likely to take office in a new government sometime in the next year. That their predecessors were often not reflective enough of the lessons to be learnt from the past, and others have ignored complex policy issues by escaping into micro management, has cost this country dearly. The starting point for a new Parliament has to be the recognition that the troubles of schooling are only partially, and certainly not primarily, the result of the shortcomings of the schools themselves. The boundary between the world of the school and that of society is highly porous. Children who come to school full of questions posed by the excitement of life around them are the ones that do best in education; not the other way around. The problem for schools (as well as the country at large) is that an ever increasing number of children now come out of their homes lacking any such inquisitiveness so that, for them, school seems purposeless, as it probably seemed to many of their parents and grandparents before them.

It is against this background that an incoming government needs to be equipped with a strategy that differentiates between short-term panaceas to deal with urgent problems, and the much longer term structural changes needed to build up whole generations of young people who know how to learn, who can communicate, collaborate, think for themselves and make decisions. What is required is much more than political solutions if it is to release the latent energy and commitment of millions of ordinary people to strengthen social capital, and revitalize civil society.

To that end the Briefing Paper concludes with ten interdependent actions that such a new government should take.

Ten Actions for an Incoming Government: A Summary of pages 21-33 of Full Text

1 Understanding Learning

Parliament must take the lead in showing the country that the task of education involves far more than producing good pupils able to pass exams. Rather, it is to equip every child to become a fully functional adult, so as to do wisely and responsibly whatever it is they will eventually have to do. Parliament has to encourage schools to begin a dynamic process through which students are progressively weaned of their dependence on teachers and institutions, and given the confidence to manage their own learning, collaborating with colleagues as appropriate, and using a range of resources and learning situations.

2 Reasserting Intelligence

Parliament must understand that intelligence comes in many forms. In a post-industrial society, where intellectual capital and applied common sense are more important than raw resources, Parliament must ensure the full development of the various kinds of intelligence of its people. Under too much pressure specifically to improve examination results schools tend to develop superficial “quick wits” rather than the more robust, long-term “hard wits” which breed flexibility and adaptability. Policy makers must appreciate that the greatest incentive to learn is personal, it is intrinsic, something that so grabs the individual’s attention that they stick at it with the personal dedication that sees any failure to resolve an issue as a personal challenge to find another way of re-framing the problem.

3 Affirming the Family

Parliament has to assert that the bringing up of children is the most important task facing the nation. How we are treated as babies and toddlers determines the way in which what we are born with turns us into what we are. It is the combined influence of home, community and school, which creates men and women capable of doing new things well, not simply repeating what earlier generations have already done. To retrieve such a dynamic an incoming government must appreciate that functional families, well-bedded within supportive communities, are the bedrock of a civilised society. Maintaining family life may be hard but to allow such a cauldron for the formation of interpersonal skills to disappear would be disastrous... and no amount of government funds for expert consultants could replace this.

4 Strengthening Community

As children grow older and more independent the influence of family and teachers decreases, while the influence of the peer group and community increases. Parliamentarians need to appreciate the evolutionary significance of adolescence and move to provide opportunities for young people to extend their learning in a hands-on manner either as formal apprentices or perfecting their skills by working alongside members of the community. Tragically, an increasingly individualistic culture is robbing communities of that which once gave it its vitality and made their pavements, town squares and backyards the spontaneous locations for inter-generational discourse. Members of strong communities are sustained by the work they do together, which was why the Board Schools of the late 19th century were so successful, and why similar arrangements could be as successful in the future. It is social capital, not institutional arrangements, that binds people together in their daily lives.

5 Unpacking the Curriculum

In an information-saturated world it is essential to appreciate what it is that children need to know and understand now that will equip them for a lifetime of performing justly, skilfully and magnanimously. Parliamentarians can no longer assume that a well-educated person is the by-product of the study of a range of academic disciplines, nor that enterprise and adaptability can simply be taught as school subjects. A far less content-prescriptive curriculum emphasising skills such as the ability to think, communicate, collaborate and make decisions is required. If subjects are taught in a way that offers children a wide variety of experiences in which both mind and senses are equally appealed to, the personality will blossom, and the child will be drawn irresistibly into a network of relationships in which slowly they will learn how to get along with other people.

Knowing what we now know we no longer have the moral authority to continue doing what we have always done.

6 Preparing the Teachers

Quality education is everything to do with teachers, not much to do with structures, and very little to do with buildings. Teachers do what they believe in extraordinarily well, but what they are told to do merely to a mediocre standard. Productive pupil/teacher relationships are based on explanation, on talking things through, and seeing issues in their entirety. Which is why teachers not only need to know a lot, but be wise enough to draw upon only that which is necessary for the learner to know at that stage. To achieve that, teachers need both technical subject knowledge and considerable expertise in both pedagogy and child development, combined with the avuncular skill of brilliant story tellers.

Immediately the country should take several thousand of this year's unemployed graduates and over the next three years pioneer a new Honour's Degree in applied pedagogy to include aspects

of neurobiology, educational psychology, evolutionary studies, didactics, philosophy, social psychology and especially community and family development, so as to create a cadre of experienced and pedagogically knowledgeable teachers with the authority to begin restructuring all aspects of pre-university education.

7 Who is in Charge?

An incoming government faces a breakdown in trust between central and local government. While Britain prides itself on being a democracy it frequently forgets that such a fragile concept cannot flourish unless each new generation is well-nurtured in the affairs of the mind, and appropriately inducted into the responsibilities of adulthood, and the maintenance of the common good. To make democracy a daily reality England should replace the large and increasingly moribund local authorities with a contemporary version of the School Boards as existed from 1870 to 1902. Such Boards should be based on discreet communities where trustees are directly elected for the sole purpose of devising and administering the most appropriate education for everyone within their community, funded directly through taxes set by the Board – local taxation, with full local responsibility. Parliament serves the country best when it creates the conditions for people to put their personal creativity into action; it does much damage, however, when it hedges its proposals with so many do's and don'ts that it inhibits individual (and subsequently national) creativity.

8 Reversing an Upside Down System

The grain of the brain is now sufficiently well understood to make it obvious that the present system of schooling, by ascribing greater resources and status to secondary schools over primary schools is, quite literally, upside down. If those resources were reallocated and an appropriate pedagogy developed this would enable formal schooling to start a dynamic

process whereby students would be progressively weaned from their dependence on teachers (see Action One). By 'front-loading' the system this would ensure that as children grow older they would have such good foundations on which to build that formal schooling would extend their own informal learning in ways which excited, rather than bored, them. Such a 'whole-system' solution will require Parliament to instigate a radical, bold and far-reaching overhaul of the respective responsibilities of school, family and community. It is not more money that is needed to transform English education, rather it is to reallocate those funds that are being spent now in ways that should go with the natural grain of the brain so as to radically enhance the quality of education, the life of children and national well-being.

9 The Case for the All-through School

Applying the first eight of these Actions, the case would quickly emerge for the all-through school, from the age of 5 to 15 or 16. Such schools should be based on an extension of present primary schools which, given their much closer identity with their communities, could begin to restore the balance between school, home and community. These schools need have no more than 700 pupils and would normally be within walking or cycling distance of a child's home – with all the social and ecological benefits that this could bring. Current secondary schools could evolve into junior colleges (as they have already in some places) with probably no more than half their current number of pupils, thus enabling the pedagogy to demonstrate that this is the point at which adolescents should capitalise on ten years of learning how to take responsibility for their own affairs.

10 A Matter of Trust

Parliament must understand that a decline in electoral turnout is not a problem in its own right but reflects a far wider decline in its perceived legitimacy and authority. Parliament has to remind itself that for a democracy to be fully functional, the state cannot simply be defined in terms of a government that makes and administers the laws within which individuals are then left free to do their own thing. Most day-to-day activity has nothing to do with the law; it is about getting on with our neighbours and creating a quality of life that depends on access to people we trust and admire. Just to live within the law means very little; but to live within the law and have a sense of civil society is to create a great place in which to live.

For the laws to be respected the people have to trust the lawmakers with doing for others what they would expect to have done to themselves – authority based on their personal example. It was in April 2009 that the Chairman of the House of Commons Select Committee on Education pleaded with Members to stop thinking of education as a commodity, but rather as a preparation for a democratic society "because community schools can only be made better when all the community support them."

Education is not just about individuals, it is how those individuals pull together for the common good. The more people who see themselves as strong enough to grab one of the few life jackets and swim to shore, the fewer are the oarsmen left to bring the others to safety.

If Members fail to understand this, and have so little faith in what they might administer on behalf of the country, where is their personal commitment to undertake that fundamental change that has eluded English education for so long? In the final analysis who would trust a doctor who was not prepared to administer the same treatment to his or her own children that he or she had administered to other people's children?

A Briefing Paper for Parliamentarians on the Design Faults at the Heart of English Education *Full Text*

PART ONE

Foundational Assumptions

One 'foundational' assumption, which has far reaching and damaging implications, is that the age of eleven is an appropriate age to transfer to secondary schools.

Why is this? Few policy makers now alive remember the all-through Elementary schools from the age of 5 to 14 that existed everywhere in England up to 1944 and which educated more than 95% of the population. Today transfer at the age of eleven is simply taken for granted, despite the fact that until as recently as the 1990s nearly all independent Public Schools opted for the older age of thirteen and a half. To transfer to secondary school at the age of eleven is not based on any research or proven good practice that this is a developmentally appropriate age for children, coming as it does a year or so before the mental disruption that often accompanies the onset of adolescence. Few now remember that transfer at the age of eleven was simply the result of last-minute compromises taken in 1944 when politicians in a hurry to build a fully national system of secondary education – but with very little extra money – resorted to cutting three years off the earlier elementary school curriculum to create the four-year secondary school (five years from 1973).

For the past sixty years (almost for the whole of living memory) English youngsters have experienced a primary curriculum that has taken the earlier nine year elementary curriculum and squeezed it into six years. This has resulted in large numbers of youngsters failing to master

essential basic skills before transferring to much larger secondary schools, all too often developmentally and emotionally under-prepared for a very different kind of education. The origins of primary and secondary schools are very different as this Paper will later explain, so is their pedagogy (the theory and practice of teaching) often expressed as "Primary teachers teach pupils while secondary schools teach subjects". Many children never come to terms with the trauma of this transfer – they lose interest in learning and confidence in working things out for themselves.

While governments can quote examination and other statistics to show that their reform strategies are improving school-based performance (which may well be questionable) other research, looking more broadly at the overall education of British children, paints a very different picture. The UNICEF *Report on The Well-Being of Children* (2007) found that British children, despite living in the fifth richest country in the world, came bottom out of twenty-one countries for the quality of family relationships, for sex, drink and drugs, and for overall happiness; they were twice as likely to be involved in fights as other nationalities. This surely suggests there is something quite fundamentally wrong with the way that British children have to negotiate the difficult task of growing up.

OECD studies of formal education systems consistently show Finland achieving the highest score in literacy and numeracy with, in the last year, South Korea moving up to tie for top place. In the PISA analysis in the year 2000 the UK came in eighth position in mathematics, fourth in science and seventh in reading literacy; in 2003 the UK fell to eighteenth, eleventh and eleventh positions respectively, falling again in 2006 to twenty-fourth, fourteenth and seventeenth positions – all this

A phrase of common usage, dating from the 1960s.

Traditionally transfer from preparatory to public school took place at the age of 13. As the Public Schools found it increasingly difficult to recruit only from expensive preparatory schools in the early 1980s an increasing number began to offer an 11+ entry, as well as 13 1/2. Independent secondary schools, not members of HMC and with few boarders, have moved almost entirely to the age of 11 for entry. This reflects the way in which the state sector's interpretation of the appropriate age for transfer has come to dominate.

In the National Accounts of Well-being 24th January 2009 it was stated: "Governments have lost sight of the fact that their fundamental purpose is to improve the lives of their citizens. Instead they have become obsessed with maximising economic growth to the exclusion ... (continued)

cont... of other concerns, ignoring the impact this has on people's well-being. What's more, the model of unending economic growth is fast taking us beyond environmental limits."

The Spirit Level: Why More Equal Societies Almost Always do Better, Richard Wilkinson and Kate Pickett, Allen Lane, 2009

Translation of Comenius' writing as recorded in *Overschooled but Undereducated*, p. 192

despite massive increases in educational expenditure.

What is it about Finland and South Korea that enables them to do this, and how is it that Britain seems so different? Both countries are more socially cohesive than Britain, and both take education far more seriously than do the British. Finland has a strong Lutheran tradition, while South Korea is essentially a Confucian society. Both cultures hold teachers and parents in high regard. There the similarities cease. South Korea, which in the mid 1950s adopted an American system of schooling, follows a highly-regimented and prescriptive curriculum which is exam and teacher dominated, and requires pupils to supplement formal schooling with long hours of extra tuition. Finland couldn't be more different.

A book released in 2009 concerned with "Why more equal societies almost always do better" explains a critical factor in understanding the relationship between England and Finland. While the ratio of the income of the richest fifth to the poorest fifth in Finland is only 1:3.7, in the United Kingdom it is 1:7.2 and in the United States it is 1:8.3.

The Finns explain their success by quoting the Czech philosopher Jan Amos Comenius whose book *The Great Didactic* (1638) can be seen as the father of what, in the latter twentieth century, came to be known as child-centred pedagogy. Comenius wrote: "Following in the footsteps of nature (learning) will be easy if it begins before the mind is corrupted, if it proceeds from the general to the particular; from what is easy to that which is more difficult; and if a pupil is not overwhelmed by too many subjects, and if its intellect is forced to nothing to which its natural bent does not incline it." Four centuries later, studies in neurobiology, cognitive science and evolutionary studies have started to unpick the deep neurological structures that create that "natural bent," (often now called "the grain of the brain"), which Comenius understood so well. Comenius moved to Sweden (which then included Finland) in the mid 1660s, and the Finns have been putting such unifying concepts into practice ever since.

The Finns do not believe that children are mature enough to go to school until they are seven years old, so government

policy is strongly supportive of families and 'child-friendly' communities which create very rich informal, early-learning opportunities. Believing that emotional development precedes intellectual growth, Finland insists that every teacher holds both an honours degree in an academic discipline as well as having a three-year pedagogic degree, also at an honours level. In practice Finnish teachers have to combine what the English see as the separate expertise of primary and secondary practice, and apply such insights when teaching pupils of any age. This pays off handsomely. The English should remember that their commentators have been saying similar things for a long time. In 1952 it was said: "All considerations of the curriculum should consider how best to use subjects for the purpose of education, rather than regarding education as the by-product of the efficient teaching of subjects." Seven years later *The Crowther Report* stated: "Until education is conceived as a whole process in which mind, body and soul are jointly guided towards maturity, a child's personality will not necessarily be developed."

The Finns fully understand such sentiments, but it seems that the English do not. The Finns place an enormous emphasis on emotional development as the precursor to intellectual growth in the earliest years of schooling. Children are taught by no more than two teachers in their earlier years so enabling teachers to get to know their pupils very well. Their schools are small and rarely have more than 700 pupils for the full age range of seven to sixteen. There is virtually no national – and only limited province-wide – curriculum prescription as the Finns believe that the details of the curriculum are best left to individual schools and teachers to decide. Few children attend independent schools. Given the supportive home and community background of Finnish children their schools are free to concentrate on the rigorous development of mental and academic skills – they work pupils hard, but humanely, and reach the highest standards quickly. The first non-school based exam is taken at the age of 16 and is used as a diagnostic guide to suitable forms of further education ... to which 97% of the students progress.

Sir Philip Morris, Quoted in Hutchinson, M. And Young, C.; *Educating the Intelligent*, 1962

Finnish teachers will often be with the same pupils for 3 or 4 years, and each teach many subjects.

Less than 2% of Finnish children attend independent schools, but those schools offer a similar curriculum to the open-entry community schools; they do not charge fees, and tend to specialise in particular kinds of learning difficulties.

Why Aren't the English as Good as the Finns or the South Koreans?

The explanation has to go beyond quantifiable statistics to an understanding of how cultural issues from the distant and not-so-distant past exercise a powerful influence on the present. For a thousand years before the reign of Henry VIII (1509-47) the Catholic Church had taught that life on earth was simply a testing ground for Eternity. Education was pre-eminently a religious issue taught in some two hundred monastic schools whose prime purpose was to train young boys to chant the Mass, and were known as Song Schools. However, as the language of the Church was Latin at a time when there was no systematic English language, Song Schools progressively became known as Grammar Schools (to a boy in the 10th or 11th century to learn Latin was comparable to a boy in Africa today learning English – it was an essential transferable skill).

The Reformation, in addition to destroying both monasteries and schools, effectively broadened the individual's responsibility to work out both his earthly as well as heavenly destiny, and effectively repositioned education as the means of improving the individual's immediate condition. The only partially-reformed grammar schools set up in some four hundred and fifty market towns but normally with fewer than fifty pupils, retained the classical Christian/Roman curriculum. Instruction was exclusively in Latin, with the curious injunction that theory was always more important than practice. Established by wealthy merchants these schools provided an education for poor pupils as an act of charity. Placing an excessive emphasis on rote learning and language skills meant that such an education, while essential for future lawyers, clerics, and administrators, became increasingly irrelevant to the emerging commercial world of late Tudor times.

By the early seventeenth century the English, having accepted Puritan theolo-

gy, then wanted to take control of secular affairs, and so challenged the autocratic power of the King. With the ending of the Civil War the Puritans set out to create a Parliamentary democracy, and it is here that Jan Amos Comenius with his belief in the potential of education to release human creativity, briefly enters the English story. John Milton, the poet and philosopher, was appointed by Cromwell to be his Secretary for Foreign Affairs. Milton recognised that the republic the Puritans were struggling to create could only survive if it were sustained by a mature and educated populace able to deal with contentious affairs through reasoned argument. Milton, much influenced by Comenius argued that as a prelude to creating a functional democracy, schools should be built in every town and village to teach people to read. Believing strongly in a work ethic, Milton also proposed replacing the grammar schools with what he called Academies which would provide a broad education for boys aged between twelve and twenty-one offering instruction in both artisan skills and academic disciplines.

Milton defined an education for an interdependent society in just 30 words: "I call a complete and generous education that which fits a man to perform justly, skillfully and magnanimously in all the offices public and private, of peace and war."

If ever there was a bold, no-nonsense statement about the development of the all-round person, Milton had it. Milton invited Comenius to England, but with the death of Cromwell the Republic collapsed, Milton lost his influence and Comenius went instead to Finland. The rest is history – Finland has had four hundred years of implementing a "complete and generous education" that was about the creation of the intelligent, all-round person, while England has had four hundred years of muddle and confusion.

With the Restoration (1660) the dream of a Parliamentary democracy based on a highly literate society was lost; Milton reverted to writing poetry and the old English grammar schools were never reformed. No other attempt was made to create a truly national system of education for the next two hundred years. To Charles II and the Stuart aristocracy education was about keeping the masses un-

Essay "Of Education" sent to Dr. Samuel Hartlib the great European intellectual in 1644.

The text of this Paper has been set in Comenius Antiqua designed by Hermann Zapf and released by Berthold in 1980

Roger Ascham, formerly tutor to Queen Elizabeth in *The Schoolmaster* (1570) stated "In the attainment of wisdom learning from a book, or from a teacher, is twenty times as effective as learning from experience".

der control, while making it possible for those of their sons who would not inherit their wealth to qualify as lawyers, soldiers or men of business.

By the beginning of the eighteenth century the high seriousness of the earlier Puritans had bequeathed to subsequent generations an energy and inquisitiveness that converged with a variety of favourable geographic and economic circumstances, to create a ferment of innovation. Taking their cue from *The Pilgrim's Progress* which, after the Bible, remained the second most widely read book in the English language until early in the nineteenth century, ordinary English men and women saw it as their personal duty to act responsibly and thoughtfully in everything they did. Here was the spontaneous expression of a nation's energy, dependent not simply on the brilliance of inventors but on the practical skills of carpenters and blacksmiths, goldsmiths, clockmakers, engineers and countless apprentices able to turn new designs instantly into new products. It was this practical creativity that was the greatest asset that England has ever possessed – self-improvement, especially the ability to read, was the nation's driving force.

The young Horatio Nelson's parents were typical of their time in sending their eleven year old son in 1769 to "learn on the job" as a midshipman in the Navy. "Do not imagine that the knowledge I recommend to you is confined to books ... books alone will never teach it to you; but they will suggest many things to your observation which might otherwise escape you," wrote the Earl of Chesterfield to his son in 1746. So universal was that sentiment that many grammar schools simply disappeared through lack of pupils; Winchester College received only 10 pupils in 1750 and student numbers at Oxford and Cambridge fell by almost a half. In a society where most people were too busy to go to school, innovation knew no limits.

RESEARCH emerging in the past twenty or so years from evolutionary studies, anthropology and cognitive sciences, helps to explain how the way of living of mid-Eighteenth Century Englishmen represented the finest balance to be found anywhere in the world between the evolution of the internal mechanisms of the brain that had been going on for several million years,

and a manageable but always challenging physical and cultural environment that had developed over several hundred years. Craftsmen and apprentices alike thrived through reciprocal behaviour, empathetic understanding, collaborative skills and delight in experimentation. Such skills and practices draw on what Professor Gardner was to show in 1983 were the different, but inter-dependent, multiple intelligences that evolutionary studies now suggest have grown over thousands of generations to become innate pre-dispositions to learn and behave in ways which enhance the individual's chances of survival. Such pre-dispositions, being innate, are only expressed if they are first activated by external environmental factors – some aspects of human nature remain largely hidden unless they are unlocked by an appropriate culture (nurture). Mid-Eighteenth Century England led the world into the Industrial Revolution by achieving a remarkable confluence of thinking and doing as ordinary people used an array of intelligences to thrive on a day-to-day basis.

The Industrial Revolution changed every aspect of this equation. While some individuals were to become phenomenally wealthy, the descendants of countless generations of self-taught farmers, small tradesmen and craftsmen, who made all this innovation actually happen, saw the craft traditions they had inherited from their forbearers completely disappear within a couple of generations. Robust individualism was replaced by an unthoughtful, demotivated and unskilled mob of people, ready only for the life the factory that was created. Subsequently, for millions of youngsters over several generations, their nature was forgotten, their innate pre-dispositions totally ignored, so depriving them of that nurture which is essential to the brain's natural functioning.

Here was social melt-down on a scale never before experienced, or anticipated. The Industrial Revolution took England rapidly up a series of steps so steep that society started to suffer from vertigo as vast numbers of ordinary people found no every-day nurture to activate these pre-dispositions which in earlier generations had enabled their ancestors to survive and thrive. This was dumbing down on a vast scale.

Frames of Mind: The theory of multiple intelligences, 1983; and The Unschooled Mind: How children think and how schools should teach; 1991, Gardner, Dr. Howard;

The Pilgrim's Progress,
John Bunyan (1628 -
1688), 1678

From Hands-on Apprentices to Hands-off Pupils

England's reservoir of thoughtful, innovative people was drastically reduced during the early stages of the Industrial Revolution. While many former apprentices became phenomenally wealthy by mechanising the very processes which had earlier given them their expertise, such men in their affluent old age failed to recognise that such informal ways of transmitting skills would disappear as factory operatives replaced independent self-taught craftsmen. As productive employment moved away from home-based workshops into factories in the cities, so traditional social structures collapsed, especially the Dame Schools (of which it is thought there were some two thousand around the country) where older women of the parish had earlier taught youngsters to read and write in church porches, which probably explains why four out of five of the soldiers in Cromwell's New Model Army of the 1640s could sign their names. Working men lost their dignity, literacy levels fell, communities collapsed, and family life fell apart. It was as Adam Smith had anticipated – industrialisation destroyed "the alert intelligence of the craftsmen" and turned their descendants into factory operatives who were "generally as stupid and ignorant as it is possible for human nature to become". Soon there was nobody left to care for the children.

By the early 1790s what to do with uncared-for children increasingly disturbed public consciousness. Parliamentarians, seeing their role limited largely to national defence, foreign policy, and the maintenance of law and order, believed that all other issues were best left to private individuals to solve. The first to do so were the churches motivated as much by the spiritual needs of children, as by their social distress. The churches started to establish Sunday Schools (on the only day in the week in which the factories were closed), and taught children to read,

how to behave and gave them probably their only cooked meal of the week. By 1800 the Sunday Schools attracted some three-quarters of a million children every week and by 1830 were educating more than two million children. The Churches then went on to build elementary schools (1,200 schools by 1820, and a further 3,000 by 1830). Here were the origins of today's English elementary schools – acts of charity designed to keep children off the streets, and induct them into the Christian religion.

There was nothing of Milton's magnanimity in these arrangements. Such economy schooling was based on a scheme first developed for orphans in India that squeezed 660 pupils into a room 39 feet wide and 106 feet long where one teacher, assisted by 24 monitors (the best pupils of the previous year) claimed to "educate" a child for 35 pence a year. But even this antagonised the laissez-faire Establishment: "Giving education to the labouring classes and the poor would, in effect, be prejudicial to their morals and happiness," claimed MPs who quickly came to despise elementary school teachers who one described as "the refuse of all callings, to whom no gentleman would entrust the keys of his wine cellar."

RESEARCHERS in a number of neurological disciplines can now show the importance of early nurture on the way in which a young child's brain develops – especially in the way emotional growth precedes intellectual development. Yet nineteenth century Victorians had accepted their Queen's comment that "little children should be seen but not heard" and effectively left them to their own devices. As we now know starving a young child of such nurture and stimulus makes it increasingly difficult to compensate for this later in life. Studies in Epigenetics are beginning to suggest that an extremely impoverished emotional environment may subsequently be transmitted genetically to the next generation, which may explain the phenomenon of learned helplessness found in many decaying industrial communities.

As it became acceptable for the education of the poor to be provided through the charity of the successful, newly-rich entrepreneurs then found that they too had a problem – they were so busy emulat-

Giddy, Davis M.P.;
recorded in *Hansard*,
1818

Lord Macaulay, the
Victorian historian
(1800-1859)

Chapters 3 and 4
of *Overschooled but
Undereducated*, The
21st Century Learning
Initiative, 2009

The Wealth of Nations,
Smith, Adam, 1776

The Rise of the Public Schools: 1837 to the Present Day, Bamford, T.W, Nelson, 1967

ing the life of the gentry that they neither wanted their adolescent sons hanging around the home nor going through the same grubby apprenticeships which had earlier made them wealthy. It was Dr. Arnold of Rugby in 1827 who offered the emerging middle classes what became known as a Public School education (though it was elite, expensive and not available to working people) that would take their sons off their hands for eight months of the year and introduced them only to children like themselves. It combined a deep commitment to Christian values with the old classical curriculum, which had been saved from collapse by a curious law case.

In 1805 the people of Newcastle petitioned Parliament for a change in the Trust Deed of their ancient grammar school to enable it to teach modern languages, commercial subjects and mathematics. The case became a defining point in nineteenth century social policy. The case came before Lord Eldon, the Lord Chancellor and an archetypal self-made Victorian whose grandfather had been a coal deliveryman. Eldon, himself, having done well in the law, became overzealous in suppressing the very social class from which his ancestors had come. He threw out the petition, claiming that "it was a scheme to promote the merchants of Leeds at the expense of poor, classical scholars." He then enacted legislation that effectively prevented any of the country's grammar schools from teaching modern languages or mathematics until 1840, so still further weakening the schools attractiveness to the commercial classes.

Dr. Arnold, by insisting that pupils should have learnt Latin in expensive preparatory schools before going to a public school, made this a demonstration of the financial ability of future parents to afford a public school education. In so doing he drove an educational wedge through English society. He took this distinction even further by virtually banning the teaching of science because its very practical significance reminded the fathers of his pupils of the industrial world in which they were now embarrassed to admit that they had made their fortunes.

So while the Churches were providing some form of elementary education for the children of the poor on three or four pence a week *as a public good*, the

emerging middle classes were paying fifty or a hundred times that amount for a Public School education which would *forever buy their sons privilege*. Each new generation of their pupils were inculcated with Plato's teaching that society should be separated into three categories, the leaders, the technicians and the manual workers – such a view of life having been totally rejected by the Puritans a century before. As such nineteenth century boys became men, they convinced themselves that, by the nature of the education which their father's wealth had procured for them, they were predestined to be the rulers in an increasingly class-conscious society.

Unlike their fathers whose earlier apprenticeships had been worked out entirely within the context of community and family, boarders at the new Public Schools grew up almost totally unaware of how the 'other half' lived. Needing to occupy their spare time (time their fathers had spent 'hanging out' with other apprentices) Public Schools effectively invented compulsory team games as a way of using up adolescent energy, and burning off excess testosterone. Several generations of such practices meant that "the penalty of belonging to a public school is that one plays before a looking-glass all the time and has to think about the impression one is making. And as public schools are run on the worn-out fallacy that there can't be progress without competition, games as well as everything degenerates into a means of giving free play to the lower instincts of men." Life to such impressionable youngsters was more about team loyalty than independent thought, for to them life was a zero-sum game of winners and losers. What mattered was whose side you were on; competition was rapidly replacing the collaboration tradition that had given the eighteenth century its vitality (see italicized note on research page 8).

Mid-Victorian society, instead of moving towards Milton's dream of an educated populace able to sustain a democracy, was fast becoming "two nations, between whom there was no intercourse, no sympathy; who were as ignorant of each other's habits, thoughts and feelings as if they were dwellers in different zones, or inhabitants of different planets".

The Two Nations and the Education Structure 1780 - 1870, Simon, B, Lawrence and Wishart, 1974

Sorley, Charles, quoted by Butler, R.A.; *The Art of the Possible*; 1971

Disraeli, Benjamin; *Sybil*; 1845

The 1870 Education Act

It was not until 1833 that Parliament reluctantly made its first grant of £30,000 towards the work of the churches in educating the children of the poor, administered on a 'Payment by Results' formulae. Each year every child was quizzed by an inspector on four core subjects, and for each subject that a child failed the grant to the school was reduced. Management of this dreadful scheme was conducted "by officials who, by all accounts, knew little and cared less, about the education of the poorer classes and who ... treated elementary teachers with contempt." "In a country where everyone is prone to rely too much on mechanical process, and too little on intelligence ... a mechanical twist to school teaching gives a mechanical turn to inspection, which must be most trying to the intellectual life of the school."

Ralph Lingen,
Secretary to the Edu-
cation Department,
1849 -1867

Arnold, Matthew; son
of Dr. Thomas Arnold
and the first National
Inspector of Schools;
1859

Not that there was much intellectual life in such schools for education was about memorisation and conformity, certainly not about the Puritan belief in taking control of your own destiny. "In this life, we want nothing but facts, sir; nothing but facts," claimed Mr. Gradgrind describing Mr. McChoakumchild, the archetypal teacher, and "some hundred and forty other schoolmasters, (as being) lately turned at the same time, in the same factory, on the same principle like so many pianoforte legs ... if he had only learnt a little less, how infinitely better might he have taught much more!"

Hard Times,
Dickens, Charles,
Chapter 1, 1854

By 1870 the churches had built enough elementary schools to educate about two-thirds of the population. Eventually Parliament accepted a public responsibility for national education with the Education Act of 1870 (known significantly in its drafting stage as *The Education of the Poor Act*). This Act recognised that the churches could never create schools for everyone, and so set up arrangements whereby people living in areas with no church schools could elect a School Board with

powers to levy taxes on all house owners to build and maintain schools, and develop the appropriate curricula, so in effect creating the two systems of elementary schools – one delivered by the churches, and the other by locally-elected School Boards.

The popularity of the 1870 Act, especially in the cities, sparked a violent reaction from the Public Schools (now numbering some forty schools educating perhaps 0.5% of the country's boys) who were incensed that any form of education should be provided by the state through taxation. Having effectively hijacked the endowments of many of the better-placed ancient town grammar schools to create their own fee-charging boarding schools, the Public School Headmasters now refused to cooperate in any way with government-led educational policy. In 1870 some twenty of these Heads came together and formed the Head Masters' Conference to protect themselves from any attempt by Parliament to reclaim those ancient endowments they had earlier appropriated for their own use and redirect them (in the spirit for which they had originally had been given) to establish a system of teacher training and a national curriculum that would have applied to all schools. The influence of these men on parliamentarians (virtually all of whose sons attended their schools) was such that they got away with this, and so consequently the 1870 Act failed to make any provision for teacher training, curriculum direction, or for any state-funded secondary education.

The scorn of those men who represented the interests of the successful Victorians tells us much about England's difficulty in defining education as a public good, rather than simply a private gain. This is best exemplified by one such Public School headmaster who asked, "Why should I maintain my neighbour's illegitimate child? I mean by illegitimate every child brought into the world who demands more than his parents can give him... the school boards are promising to be an excellent example of public robbery!" Once the best-placed of the old grammar schools had become boarding Public Schools, only 101 grammar schools remained in the entire country able to provide education up to university level,

Thring, Edward;
quoted in Parkin,
G.R.; 1898

The Taunton
Commission, 1865

and of these only half sent more than one student a year to university. By 1900 over 90% of the undergraduates at Oxford and Cambridge came from fee-paying Public Schools, whereas a hundred years before almost all had come from grammar schools.

It was amongst the growing industrial cities that enthusiasm for the Board Schools was greatest. By the 1890s some two and a half thousand school Boards (made up of some thirty thousand volunteers from the community acting as trustees) had been established educating nearly half of the country's children. For the ordinary people of England the Board Schools were almost too good to be true. If pupils wanted to remain beyond the age of fourteen, the schools enthusiastically added more subjects – foreign languages, science, technology and bookkeeping.

Because education was largely a local affair, the ability of the Board Schools to raise money for such courses was not resented by local ratepayers. Some Board Schools went on to provide 'higher-grade' classes for youngsters between fourteen and eighteen who could be trained to become student teachers. By the end of the century these Schools were offering the ordinary children of England the broader education which the Public Schools denied their own pupils. It seemed that at last the working classes now had a real chance to reclaim the all-through school dreamt of by Milton 250 years before.

But it was not to be. As the nineteenth century drew to a close institutional jealousies drowned any serious consideration of what was developmentally and intellectually needed for the totality of the nations' children. The grammar schools had become increasingly envious of the higher-grade elementary schools; the technical and mechanical institutes looked on with horror when technical education was taught by ill-qualified elementary teachers; the Churches were jealous of the apparent wealth of the Board Schools, and the Public Schools were incensed at the popularity of what they saw as mere utilitarian secondary education.

Parliament recognised that an administrative nightmare might sap the energy needed to control what was fast becoming the world's greatest ever empire for Britain's overseas trade already exceeded the combined exports of France, Ger-

many, the United States and Italy. The British Navy so "ruled the waves" that its global empire could be administered by a tiny cadre of former public schoolboys all of whom knew each other, while six of their former headmasters went on to become Archbishops of Canterbury and so out-ranked even the Prime Minister.

Behind such glamour so ill-educated were the ordinary English that industry was forced into recruiting bookkeepers and accountants from Germany, while so frustrated were many by the social constraints of the time that 100,000 men and women emigrated to the colonies every year. Education was all too obviously failing to make English society self-sustaining.

RESEARCH into how a variety of predispositions have been shaped by social and environmental factors over vast aeons of time, and how these develop into genetically transmitted "preferred ways of doing things" which still shape our everyday decisions, was published in 2002. This drew upon a range of studies to identify four "drivers" of innate human behaviour – the drive to acquire, to bond, to learn and to defend. If these instinctive, innate predispositions are not to pull the individual (and by implication society at large) apart, a consistent value system, socially constructed, is essential. While the research was stimulated by the need to understand how an overdose of neoclassical economics with its faith in unrestricted markets, had backfired in Russia in the late 1990s, the same explanation could be given for English society in the 1890s ... it was excessively dominated by acquisition, and society itself was being fragmented.

RESEARCHERS in 2007 challenged the popular interpretation of Darwin and "selfish genes" as the predominant explanation for selfish behaviour by showing that, in the struggle for survival, homogeneous groups are every bit as significant as individual self-centeredness. Evolutionary psychologists rediscovered Darwin's belief that a high standard of morality gives an immense advantage to one tribe over another and concluded: "Selfishness beats altruism within an individual group, but altruistic groups beat selfish groups every time."

Driven: How Human Nature Shapes Our Choices, Lawrence, Paul R. and Nohria, Nitin, Jossey-Bass, 2002

Reference text on page 6

Wilson, D.S. and Wilson, E.O.; "Evolution: Survival of selflessness"; *New Scientist*; November 3rd 2007

Public Good or Private Gain?

The confusion of social and moral purpose, together with the logistic difficulty of administering 15,000 separate church schools and 2,500 separate School Boards, resulted in the Education Act of 1902. Debate raged between two alternatives: either to strengthen the autonomy of the School Boards and devolve power to local communities to develop all-through schools, or to impose a national structure administered directly by Parliament that would limit elementary education to the age of fourteen, and then develop grammar schools for a proportion of the population. MPs representing urban constituencies generally supported the all-through Board School, while rural constituencies favoured the split at fourteen.

The Public School lobby, with the support of the Cabinet (all of whom had been educated at such schools and none of whom sent their own children to elementary schools) favoured the limitation of elementary education at fourteen, with some selective grammar schools for the minority who would benefit from a classical curriculum. The debate was vehement; Herbert Asquith, later to be a Liberal Prime Minister, warned that if the School Boards were destroyed, "you will put an end to the existence of the best, most fruitful and most beneficial educational agencies that ever existed in this country."

But that is exactly what happened – Parliament strengthened its control at the cost of dismissing as irrelevant the 30,000 locally elected school board members whom Asquith had so much applauded. Elementary education was limited to pupils below the age of fourteen, School Boards were abolished, and England was left with a tiny rump of grammar schools out of which to create a national system of secondary education. The behind-the-scenes influence of the Public Schools headmasters ensured that grammar school pupils followed a strictly classi-

cal curriculum, wore school uniforms to distinguish themselves from their less academic neighbours, and played rugby rather than soccer. Here were the foundations for a twentieth century tripartite society; the Public Schools free to provide the leaders, state grammar schools the administrators, leaving the great mass of the population to pass effortlessly into employment.

As industry became more mechanised there were fewer opportunities for adolescents to become apprentices and put their energies into learning new skills. Here two Americans with diametrically opposed understandings of human nature started to influence educational policy in England. Frederic Winslow Taylor's pioneering *Principles of Scientific Management* argued forcefully that modern factories needed well-drilled, rule-abiding operatives rather than thinking, intelligent craftsmen. However, John Dewey, the philosopher, came to a different conclusion from his study of Darwin – because humans had evolved to be thoughtful, creative problem solvers, any way of life that didn't activate such behaviours would eventually undermine that society.

The question in 1902 was as stark as it remains early in the 21st century: should education be about doing as you were told, or learning to think for yourself? While Taylor was highly influential with industrialists, Dewey was largely responsible for the social purpose of the American high school. Paradoxically some educationalists both in England and America began to see the role of the school in terms of Taylor's sorting people efficiently into the various positions that needed to be filled in the stratified occupational structures so resulting, years later, in both Britain and America's infatuation with standardised tests.

RESEARCH in 1988 confirmed Dewey's belief in apprenticeship, and learning from experience by explaining: "Learning is not something that requires time-out from productive activity; learning is at the very heart of productive activity."

Granville S. Hall, later to be known in America as the Father of Experiential Psychology, was horrified as he toured factories and found them littered with

Sir Robert Marrant; A Great Public Servant,
Allen, Bernard M.,
MacMillan & Co.,
1934

The Principles of Scientific Management,
Taylor, F. W., 1911

Dewey, John, (1859-1952); *The School and Society* (1899)

Hansard, 1902

In the Age of the Smart Machine: The future of work and power, Zubboff, Shoshana, Heinemann, 1988

Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion and education, Hall, G.S., Appleton, 1904

exhausted and totally unfulfilled adolescents whose spirit of inquisitiveness had been throttled at the very moment when it craved for self-expression. Lacking any understanding that adolescence was a product of evolution, or any appreciation of the ancient importance of 'initiation' into adulthood, Hall simplistically concluded that adolescence was akin to a disease that should be prevented by extending the years children spent in school. An Englishman who saw this very differently was Baden Powell who caught the public's imagination (1907) by establishing the Boy Scouts and later the Girl Guides, so thrilling otherwise bored youngsters from the cities with learning how to survive in the wild in ways that would have seemed second nature to their rural grandparents.

Thorndike, E. L.; (1874-1949), *The Principles of Teaching*, (1906); and *Education*, (1912)

RESEARCH by Edward Thorndike (1901) on the "Transferability of Skills" became important in showing conclusively that the apparent success of public school-boys in adult life was not so much a result of having studied the classics, as it was to the degree of similarity between their experience of the rough and tumble of a boarding school and its playing fields, and the survival skills needed as a lonely administrator in some African colony, a duty officer of the watch, or a businessman in a distant colony. Transferability was the result of what Thorndike called "associations", which was why the diverse experience of apprentices was generally preferable to classroom-based instruction.

All of which steadily persuaded English educators of the significance of extra-curricular activities. Several Public Schools, responding to Britain's poor performance in the Boer War, decided to introduce military drill and burnished brass into their curriculum, so inadvertently preparing England for war. At the same time the limitations of elementary schools simply teaching youngsters to read without questioning what they read, enabled the newspapers to portray the arms race of 1913-14 with all the attraction of a game of monopoly, right up to the shocking point when, over a 52-month period, educated soldiers of the three most civilised countries in the world, fought themselves to a bloody standstill. Disillusioned by war,

and dismayed that this had brought no improvement to the life of ordinary people, English politics in the 1920s started to shift to the left.

Two theories about human intellectual capabilities, each of which contained an element of truth, but when promoted as the ultimate explanation, were to do immense damage to English education, began circulating in the 1920s. John B. Watson, an early enthusiast for Scientific Management, claimed that the brain was simply a 'blank slate' with no inherited preferred ways of doing things. Children's minds to Behaviourists like Watson were simply putty waiting to be shaped by teachers, and so quality instruction came to be seen as infinitely more important than thinking for oneself.

The Behaviourists placed excessive dependence on the classroom as a closed environment where what was taught (input) and what was learnt (output) could be precisely quantified. Cyril Burt, an English psychologist, built up a totally different explanation. Through the study of identical twins in the 1930s he claimed that inheritance accounted for some 80% of intelligence, so concluding that the social divisions of mid-twentieth century England were a natural result of evolutionary processes. Consequently Burt recommended that funding for education should be allocated on the basis of intelligence tests to those who would yield the highest gain – i.e. to the brighter pupils.

Between the two wars, as educationalists speculated on the relative value of these theories, the politicians struggled with a sluggish economy. The children of the masses continued to go to free day schools until the age of thirteen, while the children of the privileged went to expensive preparatory schools until the age of thirteen and a half, and on to ever more expensive public schools until the age of eighteen. As late as 1938 82% of English fourteen-year-olds were already in employment, with only 18% continuing into some form of secondary or tertiary education.

Watson, J.B.; (1878-1958), *Behaviorism*, University of Chicago, 1930

The Burt Affair, Joynson, Robert B., Routledge, 1989

A National System Administered Locally

The Politics of Educational Reform 1920 - 1940, Simon, Brian, Lawrence and Wishart, 1974

The growth of the Labour Party in the 1930s, with its search for greater social equality, ensured a commitment from the wartime coalition government of 1940-45 to create a fully national system of secondary education. Attempting as best he could to balance the Behaviourist's belief in the malleability of the brain, with the claim that intelligence was determined by genetic factors, the Education Minister R.A. Butler largely accepted Cyril Burt's conclusions that the divisions in society mainly reflected genetic differences in intellectual ability, rather than social/cultural influences. Psychometricians made ever more confident claims that they could develop accurate tests for a unified General Intelligence which could, at the age of eleven, define an individual's intellectual potential.

Butler, himself very much an establishment figure, was constrained by Churchill's instructions not to do anything that would undermine the position of the Public Schools, while his Permanent Secretary, a former brilliant classicist, was convinced that it was his Minister's duty to provide for the tripartite separation of secondary schools as reflecting Plato's understanding of human capabilities. For technical advice Butler turned to the Headmaster of Harrow, Sir Cyril Norwood, to advise on how to structure forms of secondary schooling appropriate to different levels of general intelligence.

Norwood and the civil servants concluded that individuals had enough capacities and interests in common to justify separating early adolescents into three groups. The first "who can grasp an argument or follow a piece of reasoning ... and see the relatedness of things in development, in structure or in a coherent body of knowledge". (In other words, people like themselves). The second were those "whose interests and abilities lie markedly in the field of applied science or applied art" and who, with dismissive

echoes of Dr. Arnold a hundred years before, "prefer to follow a technical education." The third "were those who "deal more easily with concrete things than they did with ideas ... are interested only in the moment and maybe incapable of a long series of connected steps." A conventional classical grammar school was needed by the first group, and then a form of technical education (which they did not really understand) for the second group while for the third group – the bulk of the population – they recommended an essentially practical, work-based education that would fit them for employment within a stratified society.

Here, it seemed, was a national system of schooling that was to be administered by locally-elected education authorities, somewhat similar but much larger than the School Boards of half a century before. From now on all youngsters would be in school until the age of fifteen and would transfer from small, community based primary schools at the age of eleven to much larger, self-contained secondary schools whose teachers knew as little about what happened in the primary classrooms as did primary teachers know about what happened in secondary schools. All too often the primary schools inherited the dismissive attitudes associated with their charitable predecessors, while secondary schooling assumed the more favourable status associated with the old grammar schools and, to a lesser extent, the Public Schools.

Post-war England was still a 'make and mend' society; not only was money short, so were materials. Boys still learnt about how to repair boots and change washers on a tap from their fathers, and girls still learnt from their mothers about home economics and childcare. Children were better clothed, were heavier, taller, reached puberty earlier; they read a lot, played endless board and card games, ran errands, and listened to the radio for few had television sets. To implement a new education system England voted not for Churchill and Butler, but for a Labour government with the diminutive and fiery Ellen Wilkinson, a former Communist, as Minister of Education. Wilkinson wanted to do far more than just increase literacy. As a hardened social campaigner (she had led the Jarrow March in 1936) she and the teachers wanted to use new

Education in Britain 1944 to the Present, Jones, Ken, Polity, 2003

ideas to expand a child's curiosity and imagination as a prelude to creating a more just and responsible society.

Most parents in the late 1940s had themselves left school at thirteen or fourteen, and had little idea as to what secondary education might involve for their own children. "Always remember," a wonderful little book entitled *The Child at School* said, "children are children first; they are only school children second." Progressive teaching, the book explained, meant "getting children involved in making things, moving about, acting, singing, painting, hammering and sewing. The new methods, attractive as they might be, are unfamiliar to most teachers, and they are inherently more difficult, and require greater energy, imagination, skill, judgement and perception in the teachers." The book then went on to make a vital point – the role of the home as an equal partner with the school was critical. "Behaviour is determined much more by standards set by the home than by the school; children are influenced much more by the conduct of their parents than they are by their teachers."

In their ineffective translation of such ideas is the tragedy of educational policy in the 1960s. Inexperienced teachers were required to do something for which they had not been qualified, or to which they were not committed, compounded by uncertain parental attitudes, destroyed such great expectations and bequeathed to this very day in the House of Commons a cynicism that any policy based more on how children learn, than on the rigour of how they are taught, are simply dangerously 'progressive.'

For all the idealism of the educationalists England remained a jealous and divided nation. The country didn't really believe in equality – what Englishmen in the 1960s were increasingly looking for were equal opportunities to be unequal. The struggle to ensure that a child pass the Eleven Plus examination was, for many, a struggle either to remain in, or to aspire to, the middle classes.

This is still obvious when looking at the shape and design of schools built at that date. Post-war governments allocated a third more money for the building of grammar schools than they did for (secondary) Modern schools. Furthermore as the assumption was that more

middle-class children would pass the Exam new grammar schools were built in the wealthy residential districts, while the Modern schools were built on council estates, or near the factories. Twenty years later (1965) four-fifths of the Modern school buildings were deemed inadequate, a third had no laboratory, half had no gymnasium and a quarter no library. Depending on the part of the country in which they lived a child might have a one-in-two chance of a grammar school place, or only a one-in-six chance. Even more serious was the fact that it is now known that those tests had a 14% inaccuracy factor – one child in seven was misplaced, mainly as shown by the numbers of pupils it was later found necessary to re-locate to another kind of school.

The impact of the Eleven Plus Exam was frequently devastating. One headmaster recalled how a father told him about his son, "We always thought, his mother and I, that he was a bright lad. I have a shed and in my spare time I do a lot of carpentry. He used to come in and help me, and then he started making things for himself. He made a bookcase, and he bought a blueprint and rigged up a wireless set for himself. Pretty good reception, too. We bought encyclopaedias from a traveller that came to the house and we encouraged him to read them; and so he did. He used to spend a lot of time in winter evenings reading about science." The father stopped, and then after a pause added almost apologetically, "Oh well. Maybe we built up our hopes too high." He smiled a slight and sad smile. "You always think your ain bairns are pretty good. Better than they are really, I suppose."

Parents who had watched the miracle of birth and growth were briefly informed on the basis of a single number that the miracle was over. Their child was just ordinary, below average in IQ. The magic had fled, and the wonder gone out of life.

To understand England today is to remember that very many of the grandparents of today's so-called difficult pupils were just like that young boy; they had been regarded by their parents, and by themselves, as have-beens ... even before they had started. It wasn't their fault; it was the result of a system that was flawed from the start.

Half Our Future, A Report of the Central Advisory Council for Education, HMSO 1963

State School, McKenzie, R.F., Penguin; 1970

The Child and the School, Newsom, J. H., Penguin Books 1950, pages 11, 25/26 and 98/99

Muddle & Confusion

“A system that was flawed from the start” helps to explain how pupils at the time performed to the level teachers expected of them was to be shown a generation or so later as significant numbers of former top-stream secondary modern pupils began gaining Open University degrees. Conversely, many bottom-stream grammar school pupils, complacent that they had earlier been told they were amongst the gifted, were singularly unsuccessful in subsequent careers. This encouraged many to advocate for what was seen as the fairer opportunity for everybody to be provided within comprehensive secondary schools, comparable to the long-established American high school.

After twenty years the faults of the 1944 Education Act were too glaring to be ignored. It wasn't that many of the aims hadn't been eminently worthy; the formation of moral and ethical standards, intelligent use of leisure, and the social skills needed to support family and community were all highly desirable. It was simply that the opportunity to develop those skills were mightily constrained by the kind of school a child attended. If it was the grammar school, then the academic curriculum severely limited the development of social skills, while if it was the Modern school the near impossibility of pursuing academic study to any depth deprived most youngsters of the chance of progressing much beyond the life style of their fathers.

The tripartite system began unravelling in the 1960s and politicians, as uncertain as the rest of the population as to what was needed, indulged in a monumental piece of buck-passing. They simply issued a Circular in 1965 to all local Education Authorities stating that they were “aware that the complete elimination of selection and separatism in secondary education will take time to achieve. They do not seek to impose destructive or precipitous change on existing schools; they recognise that the evolution of separate schools into a comprehensive system must be a constructive process carried through

carefully by LEAs in consultation with all those concerned.”

But it was all too late, at least three-quarters of a century too late. And the indecisiveness and the compromises of the politician of the 1960s and 70s still has devastating implications upon educational thought and practice in the twenty-first century.

While the measured tones of the Circular might have sounded statesman-like, politicians must surely have realised, that while John Dewey had persuaded the Americans of the interdependence of high schools with the social aspirations of their communities, England had no such sense of a common social identity. For more than a hundred years, education had been used to reinforce social divisions and a mere high sounding ‘Circular’ from government was not going to change that. Herein lies the core of so many of England's contemporary problems – without a sense of civil society, of true responsibility one for the other, it is impossible to form a sustainable vision for the country's future.

It could have well been different if Parliament back in 1902 had voted to extend the role of the School Boards which had achieved so much by drawing on the commitment of local people to craft rich learning opportunities for all their young people. Instead government destroyed that community enthusiasm and, by reducing education to a sub-section of local government, effectively took the school out of its natural community. It could have been different again had not that Act limited elementary education to below the age of fourteen for, when the grand aims of 1944 came to be implemented, few parents of children in Modern schools had any personal experience of what secondary education might achieve. Then, and most important of all, it would have been even more different had the Acts of 1870, 1902 and 1944 not placed the Public Schools, and the education of the monied-classes, as being above (and totally separate to) the education of the rest of the country.

Such confused people in the 1960s found it extraordinarily difficult to envisage a system of education that would provide genuine flexible opportunities for all children. Comprehensive schools were conceived by idealists but were too

The Unfinished Revolution: Learning, Human Behaviour, Community and Political Paradox, Abbott, J., and Ryan, T., Network Educational Press / ASCD, 2000

often delivered amidst bitter controversy. Fearful of theories proposed by intellectuals, many English longed to proceed cautiously for while they could accept that to retain grammar schools was to assign three-quarters of the population to Modern schools, they sought to compromise. But compromise was impossible. If comprehensive schools were to exist in the same locality as grammar schools, they would inevitably lose out as, given English pretensions, the brighter children would opt for the grammar school, so that the comprehensives would become, in practice, little more than Modern schools. England in the 1970s faced the same dilemma as Milton had failed to resolve in the 1640s: for comprehensives to work, the grammar schools had to be abolished.

Initially both Labour and Conservatives supported the comprehensive principle. Edward Boyle, the Conservative minister (an old Etonian himself), acknowledged that England would never realise its potential until all children, regardless of class, received an equal education. In that spirit many grammar schools were closed in the late 60s but, as the difficulties of reorganisation grew greater, the pace slackened and political consensus broke down. Winning the 1974 election, Labour became determined that nothing should get in the way of achieving a full comprehensive system. Not yet strong enough to take on the Public Schools, Labour saw in the 170 or so direct grant grammar schools (many of which were old grammar schools that had not become Public Schools in the nineteenth century, and who had accepted government grants in the 1920s and 30s to take in youngsters on government scholarships, thereby reducing the pressure on government to build more “provided” grammar schools), highly-regarded independent (but in effect state subsidised) schools which, if converted to comprehensives, would clear out the old grammar school system.

Gambling on such schools’ financial vulnerability the Labour government issued an ultimatum – become state-maintained comprehensives, or your direct grant will be removed. The political ploy backfired badly, for just over one hundred of these schools opted for independence believing that parents were now sufficiently dismayed at the perfor-

mance of comprehensive schools to pay their fees. Rather than hastening the end of independent schools this unexpectedly increased their numbers, and so posed an ever greater challenge to the comprehensive system.

By the late 1970s England seemed to have run out of steam. Educationalists were so preoccupied with grass-root squabbles that they seemed incapable of looking into the future, while the anti-industrial culture resulted in a lack of enterprise at both boardroom and shop floor level. Elected Prime Minister in 1979, Margaret Thatcher resolved to rid herself of the old manufacturing economy and, in a series of leaps, move into a bright new England that would become ever more adept at selling things. Conservatives proceeded to represent the problems of schools as a kind of condensation of all the worst effects of what they described as the sad post-war history. Schools, they argued, dramatised the British disease – bureaucracy stifled enterprise, while unaccountable professional power fuelled an insatiable demand for increased funding and, by driving down standards, created a gulf between parents and businesses, and what schools appeared to provide.

Education was set to become the arena to demonstrate the reviving power of Conservatism, and in this it appeared to be immediately successful. But schools don’t simply exist to serve society – they are part of that society. Conservatives were slow to recognise that not every youngster is temperamentally suited to a lifetime of selling, analysing data, or simply being a link in an efficient production network where you never see the end product, or meet a customer.

Which is why the switch to a service economy has radically changed our assumptions about ourselves, for it quickly stripped out of city, town and country opportunities for adolescents to learn through doing something, and consequently apprenticeships had all but disappeared. In terms of our inherited natures, this is having the most disturbing consequences, for the satisfaction in a job well done has been replaced by the motivation to earn still more money, and that is undermining many of the values that once made England so successful, and the English people so content.

The Education System Transformed, Chitty, Clyde, Baseline Books, 1999

Education and Politics in England in the 20th Century, Gordon, Peter et al., Woburn Press, 1991

From Anger to Apathy: The British Experience since 1975, Garnett, Mark, Jonathan Cape, 2007

Failure of Knowledge Transfer

A prime reason for Britain's sluggish economic performance in the 1970s had been the slowness of knowledge transfer between scientific research and industrial innovation. Knowledge transfer between educational theory and practice was even slower. Policies in the 1980s, especially the much hyped *Great Education Reform Bill* (GERBIL), were shaped virtually exclusively by political theories concerning free-market choice coloured by the antipathy of national politicians towards local government, anything that resembled progressive education, and a deep distrust of teachers. Not only was no attempt made to interpret recent bio-medical and cognitive research (based on functional MRI scans) on how the brain works, and how humans consequently learn, such research was actually dismissed as politically motivated. Which was crazy, for much of the tension between politicians and teachers centre upon the tricky distinction between learning and teaching, for while good teaching most obviously stimulates learning, the wrong kind of teaching or the wrong set of circumstances, all too easily destroys a youngster's confidence in thinking things out for itself.

A SYNTHESIS OF RESEARCH, already available in the late 1980s, showed that humans survive because their superior brains have evolved to assimilate every new fact or experience into a dynamic web of understanding that has been shaped by that individual's earlier experience, so making the brain a "complex adaptive system." Consequently no two brains ever understand a given situation in the same way – which makes comparing the effects of a teacher to a line-manager at a factory totally ludicrous. Which led a key report to explain "The method people naturally employ to acquire knowledge is largely unsupported by traditional classroom practice. The human mind is better equipped to gather information about the world by operating

within it, than by reading about it, hearing lectures on it, or studying abstract models of it. Nearly everyone would agree that experience is the best teacher, but what many fail to realise is that experience may well be the only teacher." Asked to put this into layman's language an eminent neurobiologist simply quoted Confucius: "Tell me and I forget; show me and I remember; let me do, and I understand." Another quoted St. Augustine from the fourth century: "I learnt most not from those who taught me, but those who talked with me."

FURTHER RESEARCH into the brain's 'adaptive' capability shows that because young children have to learn very quickly, they have evolved as "clone-like" learners up to the age of eleven or twelve, at which point the brain, we now know, has a built-in mechanism that begins to fracture that clone-like process, forcing the adolescent to learn how to value its own conclusions over what it is told ... a powerful process that disturbs parents and frustrates secondary schools but is an essential process if each new generation is not to mirror its parents.

Craftsmen in the eighteenth century, by exploiting these innate, adolescent preferred ways of performing and encouraging them as apprentices to take such pride in their achievements that they overtook their masters, understood this better than the politicians and bureaucrats who shaped the 1988 Education Act. Parliamentarians twenty years ago neither thought to question the appropriateness of the age of eleven for transfer to secondary school, nor did they seek to define the purpose of education in anything other than subject terms so forgetting that "all considerations of the curriculum should consider how best to use subjects for the purpose of education, rather than regarding education as the by-product of the efficient teaching of subjects."

Quality education had simply fallen between the cracks left between ill-fitting planks of a grossly over-specific curriculum. Far from its claim of being the best national curriculum that could ever be devised, it was so flawed and so unworkable that after much vicious fighting, and the totally impossible demands placed upon teachers, the curriculum ended up

The Mind, the Brain and Complex Adaptive Systems, Horowitz, H.J. and Singer, J.L., Perseus, 1995

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Sir Philip Morris, 1952, quoted in: Hutchinson, M. And Young, C.; *Educating the Intelligent*; Penguin; 1962

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August, 1993

much as it had been in 1988, with a government spokesman apologising in 1993 that “This was because the early architects of the whole system built in too much bureaucracy, and too much convolution.”

Those battles radically reshaped the social landscape. Parents, having been told that they should hold the school responsible for the education of their children, so set parents against teachers that the stuffing was knocked out of what good teaching, and good schools, were all about. Warning government of what would be lost if education failed to recognise the significance of those changes in brain structure which automatically shift the clone-like learning of the pre-pubescent child into the self-selective learning of the adolescent, then the opportunity to reallocate resources so as to ‘front-load’ the system, would be lost. Senior policy officials in 1996 said of this, “The system you are arguing for would require very good teachers. We are not convinced there will ever be enough good teachers. So instead we are going for a teacher-proof system of organising schools – that way we can get a uniform standard.”

“A teacher-proof system” implies the very worst of Frederic Winslow Taylor’s thinking on Scientific Management. Instead of staffing schools with “broadly educated” teachers each with sufficient knowledge and professional competence to be able to plan their own work, teachers have instead been given ever thicker rule books, and required to follow more tightly prescribed instructions. The net effect has been to limit a teacher’s perception of the total role of education (rather like an over-dependence on a GPS system in a car limits the driver’s inquisitiveness as to what is going on around him). Teaching has been reduced to a job, rather than a craft or a vocation. As such, teaching quickly loses its interest, and many an active and intelligent teacher has got so frustrated by such political micro-management that some 40% of newly qualified teachers resign in the first three years. To maintain the 400,000 teachers needed in British schools it has become necessary to train 42,000 new teachers each year ... for a working life, apparently, of less than ten years.

New Labour’s belief in “performability” meant that management by objectives

would permeate every aspect of public life. Especially education. If results did not improve it meant that the system needed further refinement. There was to be nothing “soft” about the country’s vision for education with government claiming, in 2001, “The work of the Department of Education and Employment fits with the new economic imperative of supply-side investment for national prosperity.” To this end the regime of endless testing was bent to demonstrate to an ever more anxious public that it really was safe to assume that schools could do it all.

Here government shot itself in the foot. “If you are forever doing formal tests and waiting for somebody to give you marks, then you never learn the skill for assessing yourself and measuring your own knowledge and ability against genuine, outside challenges. The constant neurotic focus on grades stops teachers from encouraging connections and flexibility.”

Consequently, by so misunderstanding the nature of human learning England has forgotten that for children to grow up properly there has to be much more to education than simply sitting in the classroom. But, as the twenty-first century got underway, there were ever fewer safe places for children to sit in, ever fewer opportunities for them to learn from experience and – in a country dominated by adults’ desire to earn still more money – precious few opportunities to listen carefully to what an older person might have to say. British children came bottom of The UNICEF *Well-Being Report* because, under continuous pressure to improve the economy, home and community have been weakened as government has expanded the role of the school, effectively creating a whole new generation of overschooled but undereducated young people.

Having once been one of the world’s most creative, enterprising and apparently self-confident people, the English now seem exhausted partly by the weight of their historic legacy, and partly by the economic, ecological and social turmoil that has swamped us all. A society that has to rediscover reasons for its faith in the future is a mean place in which to bring up children. Schools are simply a barometer of the nation’s well-being, and at the moment the arrow is stuck at “stormy.”

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to Institute for Economic
Affairs, 2001

Purves, Libby; *The
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See also National Accounts of Well-being,
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Transcript of meeting
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Telling it as it really is (facing uncomfortable truths)

For twenty or more years governments, first Conservative and then Labour, have had an infatuation with the private sector as both sponsor and instigator of public sector reforms, based whenever possible on free market principles and the right to choice. In education this had started in 1988 with the establishment of City Technology Colleges as a roundabout way of undermining the control of local education authorities – a curious strategy, given that those authorities had been set up by Parliament in the first place as its local partner in administering a national system of education on the ground.

Rather than clarifying the relative responsibilities of local and national government, Parliament has persistently tinkered with the symptoms of dysfunction and, in so doing, has undermined public confidence in the role of local government making it increasingly difficult to find able and responsible citizens ready to stand for local office. This failure to recognise the significance of local government seems to be a peculiarly English attitude still rooted in the social struggles of the 19th century, and now exacerbated by the growth of a self-centred and materialist society where little thought is given to standing for public office.

When Parliament wrested control from the School Boards in 1902 responsibility for education was initially vested in large county councils to administer, as if it were a commodity like sewers, roads or social housing. In contrast the Public Schools, who only 32 years before had successfully defied Parliament's attempt to incorporate them into a national system of education, had retained their belief in the importance of the individual child. Public schools are essentially of two kinds. Eton has always prided itself on the breadth of its entry and on the development of the all-round person. Winchester has prided itself on its academic rigour. Eton is to

Winchester what a comprehensive school is to a grammar school.

The idealism with which comprehensives were introduced in the 1970s mirrored the Etonian belief in the education of the whole person, while attempting to combine a commitment to the individual needs of the child with a determination to improve the quality of life of their community. It was just what England needed but, in a period of economic stagnation and enormous inequalities of income across different parts of the country, the introduction of comprehensives became a struggle between two abstractions – education for the good of the individual child, and the testing of a theoretical model of schools that, many urged, would improve the life of the community.

When the Labour Party in 1975 abolished the Direct Grant, their strategy backfired badly, as more than half of these former grammar schools opted to become independent. Rather than lessening the challenge such schools posed to comprehensive education, this deepened the rift still further by increasing the number of independent schools by a third. When the Conservatives were returned to office in 1979 they came up with a half-baked educational strategy: they set up 30,000 scholarships to enable children who earlier might have gone to the local Direct Grant grammar school to go to any independent school of their choice. The inference was very clear; government defined independent schools as doing things better than their own state schools. Why? It has often been claimed that it was because the teaching was better, yet the teachers in private schools have been trained in the same way as those in state schools. Others said it was because of the smaller classes, while many observed that state schools were becoming so increasingly saddled with picking up the bits of a changing/collapsing society that they were being stretched too far. Labour-controlled authorities wanted to expand the role of the school to correct what they saw as social inequalities, while Conservatives wanted to pressurise schools to improve educational standards, untainted by social engineering.

Instead of holding a reasoned debate about how learning takes place, about how children develop, and the implications of recent research on how humans

learn, the last 15 years have seen a battle between the wrong adversaries – local and central government – and about the wrong issue – the control of the schools rather than the provision of appropriate learning opportunities. In retrospect it seems that both Labour and Conservatives had become ever more ideologically confused. The first act of an incoming Labour government in 1997 had been to replace the Conservative's scheme of self-governing Grant Maintained Schools with their own initiative for Foundation Schools which only a specialist in the reading of the small print could understand the difference. Both were to be found in areas of strong parental involvement where government was happy to pass direct to them the funds which earlier the local education authority would have controlled. By lifting earlier legislation that had made unfettered choice difficult, the early years of the 21st century have seen popular schools grow at the expense of those local schools forever hampered by having to deal with social problems beyond their immediate control.

Conservatives, in a response to what some saw as the 'loony-left', introduced a National Curriculum so putting Parliament's authority on what every state school (but not independent school) was to teach. This was followed by Labour putting its authority behind how it thought every teacher should teach. Consequently both parties have strangled state schools with bureaucracy. Labour then took the earlier Conservative initiative of independent City Technology Colleges to create the Specialist Schools Trust so as to introduce a variety of courses into what its own marketing people were dismissively describing as "bog standard" comprehensives – schools which politicians of both parties had created through their earlier centralist policies.

Terrified by the collapse in civil order and social responsibility in many of the most disadvantaged parts of the country, government sought to create a single, unified Department of Children's Services in which education and social services were combined to create sets of arrangements which could be defined in advance for any eventuality. Horrified by what many responsible parents saw as "the nationalisation of childhood," an ever increasing number of parents who previously would have never considered private education

left the state sector in droves.

Government's response was to play the wrong card in the wrong way – they created Academies, privately sponsored secondary schools parachuted into areas of underachievement at the whim of sponsors rather than local people. Academies draw the vast majority of their funds from national taxation, but are free to ignore whichever of the constraints which that same government had earlier placed on all its other schools and for which they were held legally responsible. Academies are not answerable democratically to the local community. Now, it seems, the ball is to be returned by opposition politicians with a determination to create thousands of primary Academies, answerable to parents, but again not to a local community.

In the meantime the majority of children attend the residual of schools which are struggling to meet both the social and the individual needs of their community against a background not far removed from the atmosphere that prevailed when W.E. Forster set out his bill of 1870 calling it "The Education of the Poor Act."

Inappropriate political muddling of education undermines the public's confidence in Parliament. "All we want," says the voice of reason struggling through all the sound bites, "is a good school locally for everyone." The experience of recent years shows that this will only happen if Westminster politicians connect with the everyday, honest aspirations of local people... for it is in Town Halls rather than in the House of Commons that the rubber hits the road. England needs able Councillors as much as it needs able Members of Parliament.

In April 2009 Barry Sheerman, the Chairman of the Common's Select Committee, appealed to MPs of all parties "to lead by example and send their children to the kinds of community schools that their constituents send their children to. Education is not a commodity," Sheerman went on to say, "It is our preparation for a democratic society."

Democracy involves much more than making one carefully considered vote every five years; it depends upon being thoughtful and respectful of other people's ideas both in public and in private, for our real authority comes from our personal example of living together within an interdependent community.

What's Now to be Done?

Shaping the future starts with a question "what kind of education for what kind of world?" A massive question, the micro and the macro all rolled into one – the nursery and its toys, the world economy and its myriad technologies. It is about private integrity and public responsibility, as well as economic competitiveness and social justice. The issues cannot be separated for what is done to children in one generation inevitably comes back to haunt society later: "The child is father of the man," wrote Wordsworth. It is a debate in which students and potential prime ministers, parents, academics and members of the community necessarily enter as equals, properly exercising their democratic responsibilities.

Do we want our children to be battery hens or free-range chickens? Farmers once thought that the most efficient way of producing eggs was to put all their hens into individual wire cages and feed them a continuous supply of food and water. Apparently contented hens just kept the eggs rolling out to the great financial satisfaction of the farmer. But that efficiency was bought at the cost of the hens never exercising their leg or wing muscles to the point at which, if the wire cages collapsed, they couldn't even stand on their own legs or flap their wings, so becoming perfect morsels for predatory foxes. Free-range chickens are very different, as any Member of Parliament who has ever been chased around a farmyard by a furious free-range cockerel will know – when cornered, the cockerel turns and, with its sharp and powerful beak, nips you painfully in the ankle, before flapping its wings and flying up to the safety of the nearest beam where it crows contentedly as you nurse your bleeding injury. Free-range cockerels retain that adaptability which has been bred out of battery hens.

For a quarter of a century politicians have attempted to micromanage the nation's way of life, the design of its schools,

and the nature of the diet (curriculum) that children receive to the extent that, when the precariously balanced national economy showed signs of collapsing in 2008/9 (to give but one single illustration) a third of this year's undergraduates, who had been tested annually to see how well they conformed to the farmer's (sorry, the Department for Children, Schools and Families) curriculum, find themselves unemployed and with little confidence in their own ability to fly off in another direction.

This analogy should not be pushed too far for humans have brains of enormous complexity, and are the heirs to a long cultural tradition that opens up enormous possibilities. Yet the English have undoubtedly been brought up with a jolt, in fact with several jolts. And so has Parliament. The single-minded drive to produce a society that works like clockwork seems to have undermined our innate human capacity to be flexible, and the reason is simple. From the time when Milton challenged Roger Ascham's preference for pupils to learn from a teacher rather than from experience, the relationship between being told and working it out for yourself has confused the English. Four centuries and more later the enthusiasm of educational policy makers for efficiency, has removed the 'working-it-out-for-yourself-bit' in favour of excessive instruction. Unless teachers are very skilled, pupils under such circumstances end up remembering what they are told, but find it very difficult to apply this in new situations. England has now to recover, and reverse, what has become an overschooled but undereducated society.

That is the first part of the problem. The second is a crisis of national identity, a crisis of cultural values. Is there any more to being English in the early twenty-first century than simply being one of a number of individuals struggling to find the best bargains? Has our infatuation with the rights of the individual dulled our awareness of the needs of our neighbours? Has a loss of altruism undermined the nation's vitality? Too often we seem unable to recognise how our past has made us the people we are. While castles, cathedrals, Victorian town halls, law courts, libraries, universities and hospitals are the visible sign of our ancestor's

determination to improve the life chances of future generations, we too easily forget that beyond those ancient stones, oak beams and stained glass, that freedom of expression which they represent can only be sustained by successive generations of well educated young people constantly recreating a vibrant civil society without the need for CCTV, Asbos or speed cameras.

The English temperament still owes much (strange as this may seem) to those Puritan theologians who laid the foundations for the modern world in the form of the Protestant Work Ethic in the sixteenth century. Based on the conviction that everyone is ultimately responsible to their Maker for the full development of their talents, this faith inspired amongst the English a delight in hard work, imagination, creativity and risk taking. Together with a respected integrity ("an Englishman's word is his bond") this faith precipitated the British into leading the Industrial Revolution and later sent them around the world as soldiers, traders, and missionaries. Great wealth, accumulated rapidly by the few, decimated what had earlier been a cohesive society, and pitted altruistic philanthropy and missionary zeal against commercial interests searching to dominate the world's primary resource producers.

In the nineteenth century it was the moral fervour of the Chartists, and in the twentieth century the Christian Socialists, that sought to redress the social inequality created by the Industrial Revolution, which subsequently gave birth to the Labour Party and laid the foundations for the welfare state in the 1940s. Confidence in the rightness of their beliefs, however, was severely undermined by the carnage of two world wars, the Great Depression and the class struggles which led to industrial stagnation in the 1970s. While retaining the outward ceremony of Christianity (God save the Queen), a respect for fair play, and at least a tolerance of one's neighbour, the emergence of strident conservatism in the late 1970s with its belief in the free market, revived the earlier Victorian belief in energetic self-help but was indifferent to the search for social justice.

By the 1980s England had become a land of economic opportunity where

men (and increasingly women) were determined to do well for themselves but with relatively little concern for the common good. In schools business studies replaced history, enterprise weeks replaced community service projects, and pressure to improve league table positions replaced any philosophic questioning of the purpose of education. All of which has come at a considerable social cost; England is now the fifth richest country in the world, second only to the United States in the difference between the richest and the poorest, yet our young people are some of the most unhappy in the developed world, our teenage pregnancy rate is the highest in Europe, and a quarter of our adults take tranquilisers. Is this the just, skilful and magnanimous society that our ancestors sought to pass on to us? As 2010 approaches we seem to have come to the end of a long historical journey.

England has to find leaders able to balance the demands for economic well-being within the boundaries of social and ecological sustainability. They must learn to educate the next generation so well that they will need, as adults, minimal micromanagement because "they simply know how to work things out for themselves." Thirdly, the country needs leaders who understand, and genuinely believe that "he who governs best, legislates least." Herein are the single most important tasks that will face an incoming government.

To achieve this the country must elect representatives with the courage and personal integrity to tell things as they really are as unambiguously as did the Crowther Report in 1952 when it stated, "until education is conceived as a whole process in which mind, body and soul are jointly guided towards maturity, a child's personality will not necessarily be developed." Such representatives, putting loyalty to the people above party politics must, above all else, awaken in the English a vision that could draw together the disparate aspirations of our currently fragmenting society so that, like Rip Van Winkle, we would awaken from two centuries of muddled dreams to rediscover what it means to equip young people to perform justly, skillfully and magnanimously.

Understanding Learning

Parliament must take the lead in showing the country that the task of education involves far more than producing good pupils able to pass exams. Rather, it is to equip every child to become a fully functional adult and do wisely and responsibly whatever it is they will eventually have to do. Formal schooling, therefore, has to start a dynamic process through which students are progressively weaned from their dependence on teachers and institutions, and given the confidence to manage their own learning, collaborating with colleagues as appropriate, and using a range of resources and learning situations.

The human brain is the most complex organ in the body; it is concerned with survival – about analyzing what is going on in the world around it, and deciding where best the individual fits in. The brain is fueled by curiosity, and the need to make sense of what connects to what, and why. No one has understood the relationship between thinking and doing better than did Confucius when he said, “Tell me, and I hear; Show me, and I remember, let me do, and I understand.” Parents with an intimate understanding of their children, frequently appreciate this better than hard-pressed teachers confined to a classroom, yet both teachers and parents invariably understand this better than civil servants, and certainly better than those politicians who seek to attach political dogma to a single part of the process. There is nothing more important to politicians professing an interest in education or social policy, yet immersed in adversarial politics, than to understand the proper relationship of thinking to doing.

Contemporary research in the social and biomedical sciences is conspiring to give an incoming government a golden opportunity to reverse what can be described as England’s upside-down and in-

side-out system of schooling (one which sees secondary education as more important than primary, and school as more important than home or community) by properly understanding the ‘grain’ of the brain. Simply to instruct – Confucius’ ‘Tell me’ – assumes that a preformed idea can be transferred from the mind of a knowledgeable adult into the mind of a young person. Neuroscience explains why this doesn’t work because a set of defence mechanisms leads the young brain to reject, as possibly harmful to itself, any idea or explanation which it has not worked out for itself.

“Show me” equips a child to repeat pre-learnt lessons successfully, but is of little use in rapidly-changing situations. Confucius’ “Let me do, and I understand” presents the learner with the challenge to think it out for himself, and so develop the neural complexity for still more adaptability. Great artists never learnt their craft from painting-by-number kits... they became great because they could envisage something unique. Children learn spontaneously; what they need is help in up-grading their own self-designed but restricted capabilities with methodologies provided by experts.

Adolescence is a deeply-engrained evolutionary adaptation that forcibly replaces the clone-like learning of the younger child with a determination to work out its own future. What effective teachers do is to facilitate and underpin the child’s learning by providing temporary scaffolding and support as the child makes its own journey, progressing from being a teacher/instructor, to being mentor or guide. There may still be moments when the guide carries the child, or provides it with a stick, but such moments should be rare for if the child keeps hold of the stick too long he or she will limp throughout life.

Here is the dilemma for policy makers, parents and teachers. You can’t ‘learn how to learn’ without actually learning something, but it is far easier to measure what is learnt, than it is to assess how that learning happened. Conventional models of schooling have perfected ways of ensuring that children give the correct answers to examination questions, but this too easily becomes a dangerous deception (league tables) for they fail to ‘fit

a man to perform." It is the performing part that is now so critical. Unless Parliamentarians take time to understand this as well as do primary teachers, they will never persuade the country of the critical importance of secondary schools becoming the place for the systematic weaning of pupils of their dependence on teachers, so enabling them to embrace the world

ACTION TWO

Reasserting Intelligence

Parliamentarians must understand that intelligence comes in many forms. In a post-industrial society, where intellectual capital and applied commonsense are more important than raw resources, the future well-being of the country lies in how well it develops the intelligence of its people. Some people seem to be naturally bright – they are quick to know what to do in unusual situations and pick up on ideas quickly. They are shrewd, well-balanced and have more commonsense than many of those who have a string of academic qualifications. They have got all their wits about them. Being in short supply we wonder where such wits come from.

It is in our ability to move effortlessly, if sometimes clumsily, from one form of intelligence to another that children improve their chances of success. Possibly one half of what is recognised as intelligence is of genetic origin; about a quarter is experiential and directly related to the environment, while the remaining 25 or 30% has been identified as "reflective intelligence" – the ability to think around a problem, to stand back and get an out-of-the-box perspective. It is reflective intelligence that responds best to education.

An incoming government must appreciate that nothing has haunted English education more than Plato's assertion

of the adult. It is not more money that is needed to transform English education, rather it is to reallocate those funds that are being spent now in ways that should go with the natural grain of the brain so as to radically enhance the quality of education, the life of children and national well-being.

that intelligence was all to do with inheritance: "When God fashioned you he added gold in the composition of those qualified to be Rulers; he put silver in the Auxiliaries, and iron and bronze in the farmer and the rest." Most philosophers and psychologists subsequently convinced themselves that intelligence was either fixed at birth, or was only capable of being increased through education or experience within narrow limits; a man might become a better farmer with education, but could never become an administrator, while a man born to be a Ruler might, with little education, emerge as an indifferent Ruler... but a Ruler nonetheless.

The English experience of allocating pupils on the basis of an I.Q. test to one of three different kinds of secondary education caused the population at large to reject such a simplistic view of intelligence. It was not until 1983 that research went beyond the search for a unitary explanation of intelligence to the identification of separate techniques that people apply when making sense of different kinds of situations, such innate processes being described as "frames of mind." It is now largely recognised that it is multiple forms of intelligences, rather than a single intelligence, that enables people to multitask as they face the complexities of everyday life. Initially seven such intelligences were proposed: to use language to communicate; to calculate and use numbers; to relate spatially and to understand direction; to use rhythm, music and proportion; to use your body effectively in multiple kinds of ways; to understand yourself, your motives and your instincts and expectations; and to understand similar things in other people. Later an eighth intelligence, variously described as

naturalistic or spiritual was added. Separate though these intelligences may be, it is the way they come together to give the individual the ability to appreciate what is going on around them, that enables them to make intelligent and appropriate responses.

Recent research has focused on the relationship of genetically controlled intelligence, to experiential intelligence, and learnable intelligence. Genetic intelligence endows some people with a Rolls Royce of a brain, and others with only a clapped-out Morris Minor. Experiential intelligence is content-specific and is non-transferable; a skilled pneumatic-drill operator would make for a bad dentist! Reflective intelligence is driven internally by curiosity, determination, resilience, and creative imagination. Genetic intelligence is to experiential intelligence what the knowledge of the route is to a driver, so that reflective intelligence is what enables a skilled driver to traverse safely the most difficult of terrain while the bad driver of a Porsche or a Saab simply lands up in the ditch. Both multiple and reflective intelligences have their origins deep in evolutionary history. As our ancient ancestors perfected such techniques, so

the ability to think around an issue from a number of different perspectives became an innate part of human nature.

Pupils who acquire reflective intelligence tend to build it up by working on their own, and inventing their own particular strategies. They may pick it up from the home, where some parents more than others model good reasoning and press their children to think about decisions, emphasising the importance of a systematic approach to study. While those of high levels of genetic intelligence generally do well when young, in later life it is those who have learnt how to put their reflective intelligence to work that achieve most.

Without policy makers understanding the reflective nature of intelligence, no educational reforms will succeed. The greatest incentive to learn is personal, it is intrinsic, something that so grabs the individual's attention that they stick at it with a personal dedication that sees any failure to resolve an issue not as something to blame on somebody else, but as a personal challenge to find another way of reframing the problem. That is what it means to have all your wits about you. That is what education has to aim for, for everyone.

ACTION THREE

Affirming The Family

The bringing up of children is the most important task facing the nation. How we are treated as babies and toddlers determines the way in which what we are born with turns us into what we are. The combined influence of home, community and school creates men and women capable of doing new things well, not simply repeating what earlier generations have already done. To retrieve such a dynamic an incoming government must appreciate that functional families, well-bedded within supportive communities, are the bedrock of a civilised society.

The greater the cognitive capacity of a species, the longer it takes for its young to grow – puppies, kittens and calves run about as soon as they are born. But not we humans. Baby chimpanzees, our nearest relatives, are as much dependent upon their mothers in the first few months of life as humans, but progressively human babies exhibit a phenomenal growth of intellectual ability – they talk, walk and play as they set out on a lifetime of self-improvement. Seventy or so years later an old chimpanzee is still dependent on the basic skills of its youth, while a human may have become an Einstein, Picasso or Mozart. How is this?

From the time our ancestors came down from the trees we have been making ever better use of our brains; steadily they have got bigger so forcing the skull to expand to the point that it can no longer pass through the mother's narrow birth canal. Consequently, human babies are born 'premature', with more than

half the brain growth that goes on in the young chimpanzee before birth, now taking place in the human baby after birth. Which has led to a further adaptation – human babies are full of curiosity which, in a safe and stimulating environment, releases numerous innate predispositions that empower the child to grow its brain rapidly in culturally relevant ways.

At birth the human baby is a work in progress. It's not simply that it is small and needs to put on weight, it is that the infant's emotional capacities are the least hardwired of any creature. Babies are dependent on the love shown to them by others but have to learn for themselves how to extend that love to other people. How we are treated as toddlers determines the way in which what we are born with turns us into what we are. Copulation was only the start of the story – it's the love of a good family that plays the biggest part.

Families are based on adults whose love and respect for each other matures and grows to embrace their children in ways that help all to grow. They set boundaries not so as to be restrictive but to ensure that children don't move into broader pastures without learning first how to negotiate the home. Good parents are consistent; their 'no' means 'no' and their children know why. Responsible parents will not wrap up their children in proverbial cotton wool but show them that, to survive, they have to know how to take calculated risks. The family, despite being balanced precariously between conflicting emotions, is the ultimate achievement of the human race. Research from Africa shows that orphaned chimpanzees (the species that starts life most like us) may often be looked after by other adult chimpanzees but, lacking the deep bonds of love that characterise human families, such orphaned chimpanzees apparently do not develop sufficient emotional empathy to form long-term stable relationships themselves. Spurned by the rest of the herd they go off on their own, and die. Could this be the fate of increasing numbers of children brought up by parents who themselves had no experience of unconditional love?

Numerous research projects bear out the findings of the Kellogg Foundation's research in the State of Michigan in 1998 into the most significant factors that contribute to a young person's success at the age of 18. Four times more important than any other factor was the quantity and quality of dialogue in a child's home before their fifth birthday; primary school came in fifth place, secondary school in seventh place. To a growing child intellectual and emotional development are so intertwined as to be inseparable.

Within the past forty years the family has come under enormous strain. Part of this has been economic as opportunities to further one's career have made long-term commitments harder to sustain. The modern techniques of contraception have devastated what had been the long-term trade-offs whereby a man and a woman could enjoy a full sexual union if the man accepted the long-term implication of supporting a family. That it was an unsuccessful deal for very many people should never undermine the reality that, as far as a child is concerned, without such security it is unable to learn to survive within an intimate family group. Empathetic and emotional skills are learnt through experience, but are taught only haltingly in a classroom.

The bringing up of children is the most important task facing the nation. It is the people of England, rather than just Members of Parliament, who have to accept that we are each who we are, because of the unconditional love extended over aeons of time by our ancestors to their children. Hard as that undoubtedly was for them it will be even harder for this and subsequent generations if they are brought up by struggling single mothers attempting to both 'mother and father' their children, and by the occasional visit of their father – many of whom have become preoccupied by retaining their own sense of identity by maintaining separate homes. Maintaining family life may be hard but to let such a cauldron for the formation of interpersonal skills disappear will be disastrous ... and no amount of government funds for expert consultants can replace this.

Strengthening The Community

As children grow older and more independent the influence of family and teachers decreases, while the influence of the peer group and community increases. Parliamentarians need to appreciate the evolutionary significance of adolescence, and move to provide opportunities for young people to rediscover learning in a hands-on manner either as formal apprentices, or working alongside skilled people within the community perfecting their skills. Community, an almost accidental voluntary coming-together of people, has suffered terribly over recent years from society's infatuation with privacy, the rights of the individual and an increasingly competitive culture. This is robbing communities of that which once gave them their vitality, and made their pavements, town squares and backyards the spontaneous location for intergenerational conversations.

Humans are a tribal species, we need to know where we belong and understand those around us. As young children grow they begin to reach out beyond the security of their immediate families in their quest to make sense of the community around them. Just as the growing Stone Age child built up sufficient confidence to wander into another family's cave, so should today's children be able to wander down the street and into a neighbour's house to discover for themselves that not all adults live or think like their parents. Communities are fast losing that sense of togetherness which we now call Social Capital, those intangible substances – such as goodwill, fellowship, empathy and the ability to give more easily than to take – that bind people together in their daily lives.

To young children, playing with other children is their most important form of learning. As they play so they learn to experiment, to develop their imaginations,

to act out parts and pretend. When they make mistakes they learn to do things differently in the future. It is children who are excited by their own discoveries who come to formal schooling keen and enthusiastic to use whatever it can offer them to help meet their personal objectives. It is not the other way around.

It is as children approach adolescence that the role of the community, and the strength of social capital, become critically important. Adolescence is that special time in life in which both mind and body need to be stretched by involving youngsters in complex, unusual and tough issues. Adolescents are neither children nor adults – no longer content simply to be sat down and talked at, yet not skilled enough to earn their own living, adolescents crave non-institutional space to work things out for themselves. Their enthusiasm and naivety can be engaging, but their exuberance often makes them terrifyingly vulnerable. Apprenticeship was, until very recently, the time when almost every youngster learnt how to earn a living with the support of a mentor. Our ancestors knew that, in the satisfaction of a job well done, lay the motivation to reach out for something even more challenging, and demanding still more skills. Parents in times past would have given short shift to teenage blues.

Adolescents are not inactive by nature; they simply become bored more easily than other people with meaningless tasks. Adolescents need the opportunity to be out and about and proving themselves. It is the energy and obtuseness of adolescence that has driven human development by forcing young people in every generation to think beyond their own self-imposed limitations, and to exceed their parents' aspirations by solving problems that earlier generations had thought intractable.

Having stripped out of today's world so many of the opportunities for young people to learn in a hands-on manner either as formal apprentices, or working alongside skilled people within the community, adolescents now fill their time earning sufficient money from non-challenging tasks to fill up those hours which their ancestors would have spent perfecting their skills, with bought-in entertainment and fashion accessories that fast lose their significance.

Adolescents are being short-changed. The values of mutuality and reciprocity that were once an important part of our community culture have been replaced by a shoulder-shrugging individuality that seems to excuse most adults from what used to be their community responsibility, freely given, of nurture and support.

ACTION FIVE

Unpacking The Curriculum

In an information-saturated world it is essential to appreciate what it is that children need to know and understand now that will equip them for a lifetime of performing justly, skilfully and magnanimously. Parliamentarians can no longer assume that a well-educated person is the by-product of the study of a range of academic disciplines, nor that enterprise and adaptability can simply be taught as school subjects. A far less content-prescriptive curriculum, emphasising skills such as the ability to think, communicate, collaborate and make decisions, is required.

Curriculum is a curious word, implying a route to be followed; when preceded by the word national it has come to mean those subjects and methodologies as defined by Parliament to meet its political expectations for the country. *Curriculum* shares a common origin with another Latin word, *curricle*, which has a very different meaning – a light, fast two-wheeled racing chariot which, by combining lightness with strength and resilience, and with no space for extraneous baggage, enables a skilful driver to win any race it chooses. *Curriculum* is about content, *curricle* is about process.

An incoming government must appreciate that the two interpretations clash at every stage. For twenty years fat rule books have attempted to ensure uniformity and the achievement of national curriculum objectives. Those who believe

Rather than being sensitive to the needs of adolescents we shift the responsibility for managing life onto their still young shoulders, and discard them when they become too much trouble. In so doing we fatally weaken that social capital which is the prerequisite for communities to hold together, and for democracy to flourish.

that education should be about the continuous development of young minds are far more concerned with what experts in human learning say about the best way of developing mental agility, stamina and resilience.

You can no more put a teacher (or a child) who has been brought up to believe in rule books into the more open situation for which the fast-moving curriculum was designed, than you can place the curricula into a rule-dominated, top-down and prescriptive organisation. Both would perish, and in doing so cause immense damage – as happened in the 1960s when Parliament had a fleeting infatuation with an early version of the curriculum without first developing the skills of the teacher, or as is happening now in 2009 when intelligent graduates, interested in becoming teachers, find that they are frustrated at every twist and turn by the thickness of the rule book.

It was the Athenians who first formalized a curriculum. Below the age of seven (note the similarity with today's Finland) all children were brought up within the home and were encouraged to play a variety of games, watch adults at work, and listen to the telling of morality fables such as those of Aesop. Between the ages of seven and twelve-to-fourteen, the Athenians defined school not as a place but as a collection of pleasurable learning experiences, one-third of which involved studying music and learning to sing and playing music instruments; one-third spent with grammarians who taught writing, arithmetic and poetry, and one-third in the gymnasium developing physical fitness. To the ancient Athenians the curriculum was about developing mind and body in the context of a well-rounded and socially-competent individual. As so it remained in England until the mid-1980s when the concept of an enterprising per-

son as someone bold enough to solve their own problems was replaced with the subtly different belief in the entrepreneur, whose boldness was expressed solely in financial terms.

“A youngster’s developing personality can be fostered by a curriculum of activity; but it can be killed by a curriculum of passivity. [If subjects] are taught in a way which offers children a wide variety of experiences in which both mind and senses are equally appealed to, the personality will blossom, and the child will be drawn irresistibly into a network of relationships in which slowly he will learn how to ‘get along’ with other people.”

In 2006 Professor Howard Gardner published his latest research “Five Minds for the Future.” It is a joining together of long-held philosophic and cognitive thought with the deepest, most recent neurological understandings. His Five Minds are: The Disciplinary Mind, being the mastery of an academic discipline or a professional craft; The Synthesising

Mind, being the ability to integrate across subjects; The Creating Mind and its capacity to define novelty; The Respectful Mind, with its awareness and appreciation of difference, and The Ethical Mind struggling to find universal values. This is a neat amalgam of curriculum breadth with intellectual depth set within an ethical framework.

With those five minds as the structure of the curricula, and Milton’s justness, skillfulness and magnanimity as defining the driver of the future, we would give children a curriculum strong enough for them to deal with all the vagaries of personal, social and economic life. Youngsters capable of thinking outside the box would ensure the sustainability of the entire species. It should be a self-evident fact that the better educated people are, the less they need to be told what to do; it is that which will sustain democracy.

Knowing what we now know we no longer have the moral authority to continue doing what we have always done.

Educating the Intelligent, Hutchinson and Young, Pelican, 1962.

ACTION SIX

Preparing the Teachers

Quality education is everything to do with teachers, not much to do with structures, and very little to do with buildings. Teachers do what they believe in extraordinarily well, but what they are told to do merely to a mediocre standard. Productive pupil/teacher relationships are based on explanation, on talking things through, and seeing issues in their entirety. Which is why teachers not only need to know a lot, but be wise enough to draw upon only that which is necessary for the learner to know at that stage. To achieve that teachers need both technical subject knowledge and considerable expertise in both pedagogy and child development, combined with the avuncular skill of brilliant story tellers.

The present system of teacher education (shorn as it is of any deep thought, or any

encouragement to new teachers to think for themselves) is a near-perfect complement to today’s schools (where what is needed is endless conformity to somebody else’s point-by-point set of standard procedures). This is no new problem; from emergency training schemes for ex-service personnel in 1945, through to the introduction of the national curriculum, governments have seen in the greater specification of what was required in specific subjects with particular year groups, the opportunity to narrowly prepare new teachers to carry out highly prescriptive activities which could then be regularly assessed against common norms. Teacher training has been reduced to the management of student behaviour, assessment techniques and standardised procedures rather than about empowering teachers to think for themselves.

An incoming Government, following the debacle over the abolition of SATs, and the incessant demands to lighten the curriculum in favour of more pupil involvement and direct teacher assessment, will be faced with teachers torn apart by their dislike of much of that which they are required to do. Having had initiative

forced out of them by political dogma for at least half their teaching careers, teachers will be wary of new ideas launched as political initiatives. Innovation overload is real, and unless teachers believe in what needs to happen, nothing will change. Only when politicians understand how to balance the demands for economic well-being with social and economic sustainability, will they be trusted by professional educators who, in their hearts, believe implicitly in the education of the whole child. Because humans construct new understandings in unique ways, teacher education needs to be based on the insight of St. Augustine: "I learnt best not from those who taught me, but from those who talked with me." It really is that basic.

There are three categories of teachers. *Firstly* those in training; here the English need to emulate the Finns who require aspiring teachers to have both a three-year honours degree in a specific subject, and a further three-year master's degree in pedagogy. Knowing well both what they teach and how they teach, they are a highly respected profession. Their master's degree covers topics of a kind often dismissed in England as being trendy and left wing – pedagogy and educational psychology, principles of didactics, social psychology, the theory of play, and teach-

er self-knowledge. Such broadly educated teachers have an expertise and a professional pride in their work which has been denied to teachers in England by the shallowness of years of simply functional teacher education.

Immediately England should take several thousand of this year's unemployed honours graduates and over the next three years work with them to create a cadre of academically and pedagogically mature teachers to stimulate and reshape the entire English education system. *Secondly*, for those currently in post, an incoming government must identify those already in the profession who have for many years understood the profound nature of the necessary changes but have been prevented by present legislation from implementing these at the scale which is necessary. They must be used to revitalise current professional development courses so as to equip the profession for systems-wide change, rather than simply to survive within it. *Thirdly*, administrators, as well as Parliamentarians, have to so appreciate the significance of these Ten Actions that they do everything in their administrative and legislative power to support the transformation of the entire education system.

ACTION SEVEN

Who is in Charge?

An incoming government faces a breakdown in trust between central and local government. While Britain prides itself on being a democracy it frequently forgets that such a fragile concept cannot flourish unless each new generation is well nurtured in the affairs of the mind, and appropriately inducted into the responsibilities of adulthood and the maintenance of the common good. Parliament must understand that a decline in electoral turnout is not a problem in its own right but is linked to a far wider decline in its legitimacy and authority and the perception of the people that they are unable to

influence local decisions. Politicians should strive to facilitate national creativity, not try to dictate it.

The 1944 Education Act sought to balance central government's role in policy making with local government's responsibility for on-the-ground implementation. Such democratic structures worked well as long as significant numbers of the public were willing to stand for local political office and celebrate local identity. But as England became more prosperous in the 1960s, fewer people were prepared to invest time in local politics, while the growth in alternative life styles both fractured communities, and so weakened the concept of family that the analogy of a teacher's action being like that of a 'reasonable' parent started to break down. Then, as the manufacturing economy began to collapse, local politicians, seeking to redress extreme social deprivation

within their own communities, clashed violently with Parliament's determination to transform the national economy along free-market principles.

Trust between central and local government began to breakdown when Westminster politicians challenged the autonomy of local authorities through limiting their fiscal powers, putting particular pressure on local education authorities (LEAs) whose solution to every problem seemed to Westminster politicians to involve still more national taxation. The imposition of a highly specific national curriculum was the first step in this assault, followed by the transference of those funds that earlier each LEA had distributed according to local need. These now went directly to individual schools to spend in ways that improved test scores so leaving it to market forces to close schools in ways which LEAs could no longer do on a planned basis. Thirdly, and most destructively in terms of sustaining a belief in local democracy, came City Technology Colleges, Specialist Schools and Colleges and recently Academies – institutions set up by private sponsors in conjunction with central government, independent of any control from the democratically elected LEAs (in whose midst they very obviously sit like cuckoos' eggs), receiving their funds direct from government, but not accountable to the local community in terms other than satisfying future 'customers'.

To recover trust between national politicians and local people, England has to replace the large and increasingly moribund LEAs with a contemporary version

of the School Boards as existed from 1870 to 1902. These Boards were far smaller than yesterday's Local Education Authorities, and were based on discrete communities where the trustees were directly elected for the sole purpose of setting out and administering the most appropriate education service for their community, which had to be funded through taxes set by the Board. In recent years governments have sought to tap into some of that local energy by setting up semi-independent Academies, but this has left those schools that do not attract such sponsorship to largely flounder alongside the demoralised Local Authorities. Furthermore, they reinforce the assumption that 11 is the correct age of transfer; Board Schools originally went from five to 16. They were most successful in using local energy and pride to develop and improve all the schools for which they were responsible to the entire community. They were abolished, however, because their very success in showing what could be achieved locally was too great a challenge to Victorian Parliamentarians' sense of hierarchy. England has to recover that sense of local pride and direct responsibility that would revitalise even the most depressed of communities who know better than anyone else that they are only as strong as their weakest link. As it was in the 1890s, so should it be in the future – local taxation with full local responsibility.

Parliament is not simply responsible for the day-to-day well-being of the people; it is responsible for operating in ways that strengthen the country's faith in the democratic process.

ACTION EIGHT

Reversing an Upside Down System

The grain of the brain is now sufficiently well understood to make it obvious that the present system of schooling, by ascribing greater resources and status to secondary

schools over primary schools is, quite literally, upside down. If those resources were reallocated and an appropriate pedagogy developed this would enable formal schooling to start a dynamic process through which students are progressively weaned from their dependence on teachers and institutions, and given the confidence to manage their own learning, collaborate with colleagues as appropriate, and using a range of resources and learning situations.

To do this England has first to come to terms with its history. English schools represent a convergence of two traditions: the classical curriculum as taught in grammar schools from as early as the 4th century, and various forms of vocational education as provided in structured apprenticeships from the 13th century onwards. Grammar schools nearly disappeared in the mid-1700s as parents, responding to the economic opportunities opening up for their children determined "to make their sons rich, rather than learned men." As the church schools began to replace the old dame schools in the early 19th century, and the board schools started to offer vocational subjects, apprenticeships too began to disappear. Some old grammar schools remained, but redesigned as elite public schools for the wealthy. The 1902 Education Act, by truncating elementary education for the masses at the age of 14, effectively placed English schooling at the very heart of a class divided society. Having been denied the opportunity to extend popular schooling upwards to the age of 16 (as in today's Finland) government in 1944 compounded the problem by separating schools into primary and secondary at the inappropriate age of 11, and then used intelligence tests to further split secondary education into three parts.

By the 1950s this affected primary education in three ways: it confirmed the view that primary education was essentially custodian; that primary schools were the poorer of the two partners (tarred by their charitable origins), and thirdly, by maintaining the old elementary school's belief that early years schooling should be as much concerned with emotional as intellectual growth, this led to the public assumption that primary teachers need not be as qualified as secondary teachers. At the same time secondary education came to be dominated by the subject specific expectations of the grammar schools (as they aped the public schools) who had little sympathy for pupils who asked too many questions, seeing their objective in more glowing intellectual terms as getting their best pupils into university. "Primary schools teach pupils, but secondary schools teach subjects" came to mean, in the public's imagination, that secondary education was more important than primary and consequently merited higher

levels of expenditure.

Then came disaster: accepting in principle in 1965 that selection at 11 was not working, but still failing to see that the overall aim of schooling should be to provide well-rounded future citizens (which the grammar school argued was not the same as intellectual alertness), comprehensive schools simply took the existing separate curricula of grammar, technical and modern schools and placed them altogether under one enormous roof. Transfer from relatively small primary schools at such an inappropriate age meant that significant numbers of pupils never really fitted in, and the more they 'rebelled' the more the comprehensive schools claimed that they needed higher levels of staffing than the primary schools to make up for what they said had not been 'achieved' earlier.

There was another way of looking at this which only the most perceptive noticed. Children, whose imaginations had been fired up by the kinds of early education offered by Froebel, Steiner and Montessori schools (almost exclusively schools independent of the state system) didn't need the expensive range of minority subjects offered by the comprehensive schools to pacify those other children who never experienced the thrill of deep learning and who subsequently required spoon feeding in order to pass their exams and keep them quiet. Thus, with the failure to provide all young children with the stimulating challenges needed to activate their innate predispositions, the comprehensive schools found themselves investing in an ever greater range of minority subjects to make up for boredom in the mainstream subjects.

As comprehensive schools grew steadily larger they became more cumbersome, more institutionalised, and more impersonal. The larger the school the greater became its catchment area, so children's journey-to-school-time lengthened, leaving them with less time to spend at home, in the community, or with their friends. Schools became so big and complex that they detached themselves from the child's natural community, and from the support and sympathy of parents. Schools became effectively self-centred worlds of their own, just at the stage when healthy adolescents needed the space to make their own explorations.

As the rate of family breakdown escalated, more children came to primary school emotionally and mentally ill-prepared making it still more difficult for them to be ready, six years later, to go on to secondary school. Government compounded the problem by implying that the role of the home, as well as that of the community, could all be rolled together into 'extended schools,' open from before breakfast until after supper. "Let the schools now do it all!" What adult in their right mind would want a 10 or 11-hour working day? The image of the battery hen farm grew even stronger as children knew less and less of life beyond the school gate.

Rather than daring to question whether it was the model of schooling that was creating the very problems schools were now seeking to solve, government placed its hope in finding a new generation of Super Heads. These Heads with a combination of charismatic leadership, the latest management techniques, industrial sponsors and money to build "Schools for

the Future" (together with incentive bonuses for achieving examination results), sought, Canute-like, to defy the tide. But in the end the tide always wins.

The solution calls for a radical, bold and far-reaching overhaul of the entire school system, and of the respective responsibilities of home, family and community for young people. As with the inimitable Sir Humphrey, the words radical, bold and far-reaching can be taken to mean political suicide for any Minister attempting to go beyond what is manageable, controllable and consistent within present constraints. And herein lies the problem for an incoming government – reforms that are manageable, controllable and fit into present administrative structures have only served to worsen what, for ten or more years, has already become a toxic combination of conflicting expectations.

Yet not to be bold, radical and far-reaching would show up future politicians as being spineless, and no more able to grasp the significance of these changes than their weak and indecisive predecessors.

ACTION NINE

The case for the All-Through School

Providing an incoming government recognises the relationship of a pedagogy based on what is now known from research about the structure of human learning, and the critical need to build teacher education on such skills, then it will become possible to lessen the divide between the current practices of primary and secondary education. All this is dependent on replacing the 'single-purpose' instructors with those who, using a medical analogy, resemble the best 'General Practitioners' – teachers who see the child in its entirety, rather than focusing on the disconnected bits.

It is not simply a change in formal education that is needed. A quality education has been well likened to a three-legged

stool which can balance on any surface, however rough, providing the legs are of the same length; the legs being the home, the school and the community. If one leg is either too short or too long, the stool cannot balance. It is an analogy much favoured by experienced teachers who recognise the importance of every child experiencing the emotional support of the home, the variety to be found in the community, and the intellectual rigour of the school. Two years ago a senior educationalist commented with assured worldly-wisdom, "We have a new definition which involves two long legs – the school and the government; the community leg has simply disappeared, and for many children the home leg has become so short as to be almost irrelevant." The audience groaned – the analysis was truthful, the implications horrific. Can anything be done?

The answer is an emphatic yes, providing the first eight Action Points are all acted upon. But this is an agenda that will take a generation to work through. In time the case would be made for all-through schools to replace the current

separate primary and secondary schools. As individual teachers, administrators and politicians see this in operation they would separately come to appreciate the significance of providing the best resources to the youngest children, while also providing ample opportunities for parents and community to develop their own out-of-school informal curriculum. Artificially contrived homework schedules, backed up by the threat of detentions, would be replaced by the active participation of youngsters in inter-generational groups in out of school hours. The content-laden curriculum would be replaced by the efficient and fast-moving curricula (Action Five). With a reduction in the number of subjects offered, and a vast improvement in the quality of teaching and learning, the case would then be made for the all-through school, say from five to fifteen. This should be based on an extension of the present primary schools which, given their much closer identity with the communities, could begin to

restore the balance of home, school and community in a child's life.

Such enhanced all-through schools, emphasising quality learning rather than superficial breadth, need not have more than 700 pupils (as in Finland) and, as such, would be more likely to be within walking and cycling distance of the child's home – with all the social and ecological benefits that would bring. Moreover, current secondary schools could evolve into junior colleges (as they have already in some places) with probably no more than half their current numbers of pupils, thus enabling the pedagogy to demonstrate that this was the point where adolescents could capitalise on ten years of learning how to take responsibility for their own affairs. Nearly 400 years after Milton set out almost exactly this proposal, England could at long last be in a position to produce young people who acted justly, skillfully, magnanimously and walk purposefully – and smile at the same time!

ACTION TEN

A Matter of Trust

Parliament must understand that a decline in electoral turnout is not a problem in its own right but reflects a far wider decline in its perceived legitimacy, and authority. Parliament has to remind itself that for a democracy to be fully functional, the state cannot simply be defined in terms of a government that makes and administers the laws within which individuals are then left free to do their own thing. Most day-to-day activity has nothing to do with the law; it is about getting on with our neighbours and creating a quality of life that depends on access to people we trust and admire. Just to live within the law means very little; but to live within the law and have a sense of civil society is to create a great place in which to live.

Civil society is about the quality of human relationships implied by covenant; it is where people learn to accept responsibility for the consequences of their actions. It is where the small-scale meets the mega issues. Civil society is where one can find the human face – not in the laws, and not in the operation of economic theories of life, nor in nebulous philosophies. Civil society is essentially down to earth. Civil society is created by mutual trust, but is quickly destroyed by selfishness. The state on the other hand is central and impersonal; it uses power, not goodwill to achieve its objectives. When taxes replace generosity, and social workers replace caring neighbours, something precious within the organic nature of society withers.

Thomas Jefferson said of democracy: **"I know of no safe depository for the ultimate powers of a society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform their discretion."** Later, as he drafted

the Declaration of Independence which turned him from being an Englishman into an American, he recalled how the Pilgrim Fathers pledged in 1620: "We whose names are underwritten... solemnly and mutually in the presence of God and one another, covenant and combine our services together in a civil body politic..." Those embryonic Americans swore loyalty to each other because they knew they were literally all in the same boat.

There is a subtle difference between a covenant and a contract. We are all familiar with contracts and their clearly defined boundaries beyond which neither party may tread. Covenants, however, go beyond the legal boundaries of a contract to embrace a never-ending commitment to each other. In a covenantal relationship no amount of shoulder-shrugging, no anguished appeal to the letter of the law, can ever excuse the knowledgeable individual's responsibility to do what he or she believes is right. "We have left undone those things we ought to have done, and done those things we ought not to have done ... and there is no health in us," said the Book of Common Prayer a few years later. To fail to do something which we are required to do is one thing, but to fail to do something which we know ought to be done makes one equally culpable in a covenantal relationship of letting other people down.

This on-going 'binding' of each to the other is a hard act to follow. In terms of this Paper on education it is a challenge played out each year as increasing numbers of families ponder whether to send their child to the local school or – in the jargon of the market economy – to "assert their freedom to choose" private schooling. It is a question that splits families, friends and communities apart. Is education primarily for private gain, or public good? Although we don't like seeing it in such stark terms, isn't this actually a question about our faith in democracy? Milton certainly thought so and believed that it would be possible to have a balance between the two providing it was a society where justice, skilfulness and magnanimity were practiced equally in

public and in private.

The Initiative believes that it is the basic right of parents to educate their own children privately if there is a genuine personal need. However, at a time in England's history when a growing proportion of better-off people virtually make a statement of their wealth by not even considering state education for their own children, it seems that the issue of a two-tier education, Disraeli's "Two Nations, (between who there was no intercourse, no sympathy; who were as ignorant of each other's habits, thoughts and feelings as if they were dwellers in different zones, or inhabitants of different planets)" has returned to haunt England.

It was in April 2009 that the Chairman of the House of Commons Select Committee on Education pleaded with Members to stop thinking of education as a commodity, but rather as a preparation for a democratic society "because community schools can only be made better when all the community support them." Three months later (July) a poll revealed that more than 90% of aspiring candidates from one party expected to educate their children privately.

To question, in such a public way as this, the individual's right of choice is to suggest, to many, that one is out of touch with modern reality – a reality which believes that the greater the choice the happier and wealthier the people will be. But education is simply not like that. It is not just about individuals, but how those individuals pull together. The more people who see themselves as strong enough to grab one of the few life jackets and swim to shore, the fewer are the oarsmen left to bring the others to safety.

If Members fail to understand this, and have so little faith in what they might administer on behalf of the country, where is their personal commitment to undertake that fundamental change that has eluded English education for so long?

In the final analysis who would trust a doctor who was not prepared to administer the same treatment to his or her own children that he or she had administered to other people's children?

ASPIRING POLITICIANS, as well as Members seeking re-election, intending to restore dignity and authority to Parliament, should reflect on Wordsworth's thoughts as he gazed across Westminster Bridge almost two centuries ago in 1811:

Milton! Thou shouldst be living at this hour;
England hath need of thee; She is a Fen
Of stagnant waters: altar, sword, and pen,
Fireside, the heroic wealth of hall and bower,
Have forfeited their ancient English dower
Of inward happiness.

(Bower = cottage; Dower = inheritance)

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