“Knowledge Capitals”
Education in Cities
for the 21st Century:
Challenges and opportunities
for urban renaissance
Manchester

From Roman outpost to medieval market town, to world capital of the cotton industry to urban decay and rebirth
Educating the Urban Caveman
Far from our home on the African savannah how can the latest descendants of Stone Age Man turn cities into Paradises?
From Great Ape to Urban Man in 7 million years; How the “Big Headed” species came to dominate the planet
We are the Learning Species
It is our brains that give us our superiority, not our muscles.
We are also the small group species

...and our ultimate strength comes in our ability to collaborate
Predisposed to learn rapidly through mimicking the behaviour of our elders when young, humans then enter a fascinating period of turmoil — we call this adolescence — in which the learner reshapes himself/herself so as to take full responsibility for their future thinking and development.

“The teenage brain is crazy by design”
For a genetic mutation to effect a significant change in the brain takes at least 30,000 years. “Urban caveman” are trying to run 21st century software on hardware last updated 30,000 years ago.

“You can take man out of the Stone Age, but you can’t take the Stone Age out of man”

The Great Diaspara out of Africa

... Language

... Hunter / Gatherer

... Adolescent risk takers
10,000 years ago; first settled agriculture

5,000 years ago; first towns
Sumeria
Ur of the Chaldees
Babylon
My name is Ozymandias, King of Kings
Look on my works, ye Mighty and despair
Nothing beside remains. Round the decay
Of that colossal wreck, boundless and bare
the lone and level sands stretch far away”
Percy Bysshe Shelley, 1819
Athens… the ultimate in sophistication, but it was based on Democracy. Athens only fell, as had Sparta before it, when ordinary citizens failed to act responsibly.

Rome… the city (urbs) defined civilization; “Urbanity” — a civilized man who was courteous and refined in manner.

Rome outgrew its resources: From wheat for the poor to the declining sense of ownership. Arrival of the Barbarians.
We are also the small group species, and our ultimate strength comes in our ability to collaborate. This relates to a feature of our biological natures. We have a strong sense of self, and we have an almost equally strong sense of community, because we — again as a species — can’t survive on our own. We also have an instinctive sense not so much as to what is right (that is a culturally defined concept) but of fairness. That is linked to happiness. Bangladesh is the country recording the highest level of national happiness (even though it is one of the world’s poorest).
Research into what creates happiness shows that, once basic human needs are satisfied, the more money you get does not proportionately increase your happiness. Put the other way around, if everyone has just about the same amount of money then people are happy; it’s only when you see that someone else (especially if they live near you) has more money than you that you begin to feel unhappy. “It’s just not fair” you moan to yourself.

The ordinary Roman in the fifth century no longer felt that he, or she, had a commitment to Rome — their sense of ownership had been high jacked by the wealthy elite. It got to the stage that they saw the Barbarians as their allies.
Cities really are a very recent human creation

-Chang’an, capitol of Tang China was the world’s largest city in the 7th century

-London, with 120,000 people in the reign of Elizabeth I was the largest city for most of the 19th century

-Manchester; 1756 – 30,000 people
  1801 – 75,000
  1901 – 645,000

London’s growth was facilitated by the building of a massive sewage system.
The Industrial Revolution. Adam Smith, writing in 1776, “feared deeply for the intellectual degradation of the workers when the division of labour proceeded too far for, by comparison with the alert intelligence of the husbandman, the man whose life is spent performing a few simple operations generally becomes as stupid and ignorant as it is possible for a human creature to become”.
The pace of change has become remorseless.

**Luddites;** bands of workers who combined to smash up the textile machines in Manchester in 1811–1816.

**Taylorism:** “We don’t want to work as fast as we are able to. We want to work as fast as we think it is comfortable for us to work. We haven’t come into existence for the purpose of seeing how great a task we can perform through a lifetime. We are trying to regulate our work so as to make it auxiliary to our lives” (1914 USA).
The search for meaning

L.S. Lowry painted small matchstick figures set against the iron and brick expanse of urban and industrial landscapes, settings provided by his life in Salford and Manchester. (1887 – 1976)

Peter Seeger singing Malvina Reynolds song in 1963:

“Little boxes made of ticky tackey
And the people in the houses
All went to the university
Where they were put in boxes
And they all came out all the same”
Crisis of meaning

“The biggest crisis we are facing is a Crisis of Meaning. The tremendous social changes of the last 100 years have stripped modern society of that which gives us meaning, be it in our roots to our ancestors, religions, spirituality, our relationship to nature… Within this Crisis of Meaning our young people are facing a MORAL crisis — a crisis of values. Without these anchors young people no longer understand the value of perseverance, learning for learning’s sake etc. Instead our daily lives are filled with a pursuit of money and temporary ecstasy. Both of these goals are unfulfillable and result in a misguided frenzy in the pursuit of the next thrill, or in depression.”

Jakarta International School 2001
We are the Learning Species, not the “Taught” species

Tell me, and I forget
Show me, and I remember
Let me do, and I understand

Confucius
“This much we now know. The brain learns best when it is trying to ‘make sense’. When it is building on what it already knows. When it is working in complex, situated, circumstances. When it accepts the significance of what it is doing. When it is exercised in highly challenging but low threat environments. Children learn spontaneously. What they need, however, is help from experts in how to learn better — how to upgrade their own self designed but restricted capacity for acquiring information, and creating experience.”
What is going on in the world around us?

“If civilisation is to survive, it must live on the interest, not the capital, of nature. Ecological markers suggest that in the early 1960’s, humans were using 70% of nature’s yearly output; by the early 1980’s we’d reached 100%; and in 1999 we were at 125%.

Ronald Wright
A Short History of Progress
“The mood of western civilizations is Abrahamic: “May we take this land that God has provided and let it drip milk and honey into our mouths forever.” Now more than 6 billion people fill the world. The great majority are very poor; nearly one billion exist on the edge of starvation… half of the great tropical forests have been cleared. It is the wreckage of the planet by an exuberantly plentiful and ingenious humanity… a global land ethic is urgently needed. Surely our stewardship is the only hope.”
Education is the ability to perceive the hidden connections between phenomena.

Vaclav Havel, 2000
Learned helplessness has to be eradicated from its roots upwards. It is a contradiction of what we humans are all about. It’s very little to do with buildings, or equipment; it’s everything to do with the quality of human relationships and integrity.
It’s not so much a new national Curriculum that we need, as a national philosophy of education.

What is our vision of the kinds of people we would like to be, and how do we achieve this? It means asking two questions:

…Do we see children as potential customers, or as pilgrims on a lifetime’s journey?

…. Do we see education as treating children like battery hens, or free-range chickens?
I’ve said very little about new buildings, and what I have said equates to the child in a city, as it does to a child in the country.

I’ve said virtually nothing about technology, not because I think it’s unimportant (I did put in England’s first ever fully-computerized classroom back in 1979), but it’s a second order issue... if you’re not sure how children learn, and you’re not sure what they should learn, it’s difficult to use the technology wisely.
We cannot think of Schooling in Isolation from many other changes in our social structures.
- The Market Economy, and globalisation
- Demographics, and the beginning of the pension crisis
- The Spiritual issue — “What is life all about?”
- The Communication Revolution
- The Sexual Revolution, and its impact on the family
- The creation of a Sustainable World/Economy
- The Nature of Work, and Human Dignity
- The Patterns of normal Human Development

… only having considered the above can we really begin to work on what may be the future contributions of schools.
Research from the Kellogg Foundation, Conducted in the State of Michigan, into the Predictors of success at the age of 18

“[This] compared the relative influence that family, community and other factors have on student performance. Amazingly it concluded that factors outside the school are four times more important in determining a student’s success on standardized tests than are factors within the school.”

“The most significant predictor was the quantity and quality of dialogues in the child’s home before the age of five.”

Quoted at The White House Conference on Early Childhood
“Why Love Matters: How affection shapes a baby’s brain”

“Our earliest experiences are not simply laid down as memories or influences, they are translated into precise physiological patterns of response in the brain that then set the neurological rules for how we deal with our feelings and those of other people for the rest of our lives. It’s not nature or nurture, but both. How we are treated as babies and toddlers determines the way in which what we’re born with turns into what we are.”

Sue Gerhardt, 2004
“The neural basis of cognitive development: a constructivist manifesto”

The Salk Institute, San Diego, California

“As we build networks and patterns of synaptic connections when we are very young, so we build the framework which will ‘shape’ how we learn as we get older, such ‘shaping’ will significantly determine what we learn — it will be both an opportunity, and a constraint. The broader and more diverse the experience when very young, the greater are the chances that, later in life, the individual will be able to handle open, ambiguous, uncertain and novel situations.”
Adolescence

Adolescence is currently seen as a ‘problem’ in Western Society; that excess of hormones leaves the rapidly maturing child unaware of its new physical strength, and confused as to how to direct it. While modern parents and teachers find adolescence disruptive, earlier cultures directed this energy in ways that developed those skills on which the community was dependent for its ongoing survival. In doing so it also ensured that young people learned, and practiced, what was seen as appropriate social behaviour.
Adolescence is an internal mechanism that prevents children from becoming mere clones of their parents. Adolescence is probably a deep-seated biological adaptation that makes it essential for the young to go off, either to war, to hunt, to explore, to colonize, or to make love—in other words to prove themselves, so as to start a life of their own. As such it is adolescence that drives human development—it is adolescence which forces individuals in every generation to think beyond their own self-imposed limitations, and to exceed their parents’ aspirations.
“Give me land,
Lots of land under starry skies above,
Don’t fence me in.
Let me wander over yonder
Till I see the mountains rise.
I want to ride to the ridge
Where the West commences,
Gaze at the moon
Till I lose my senses;
Can’t look at hobbies
And I can’t stand fences,
DON’T FENCE ME IN.”

Cole Porter, 1942
Don’t fence me in! on behalf of today’s children, and generations not as yet born, don’t ever confuse schooling with learning, and respect the reality that some kids just don’t fit into schools. Increasing numbers of them are very unhappy.

Figures released earlier this week (The Guardian, 28th November) show that as many as one in five girls between the ages of fifteen and seventeen self harm because of feelings of academic failure and social inadequacy. Fifteen percent of teenagers have considered suicide.

Is this the price we are paying as we search for the perfect, rather than the contented, child?
Upside Down and Inside Out

A description of the assumptions we have inherited about systems of learning, namely, that older students should be taken more seriously than younger students and that the only learning that really matters is that which is formal.
Intellectual Weaning ("Do it yourself")

Subsidiarity:

It is wrong for a superior body to retain the right to make decisions that an inferior body is already able to make for itself.
Seeking a balance between Teaching and learning

News Report from Seoul, South Korea — 04/10/2005
(The Chosun Ilbo Paper)

An increasing number of people fed up with the standardized education provided by Korea’s public schools are turning to alternative education… highly educated and professional parents lead the trend, and the children of academics, teachers, doctors, lawyers and entrepreneurs now make up a substantial proportion of people at alternative schools. “I’ve always wondered if children are happy within the boundaries of formal education”, says Professor Lee Tae-woo of Yeungnam University, “If children get a standardized
education like battery chickens, they can’t develop their own personalities and thus make themselves unhappy”. Lawyer, Kang Ji-won who is already sending his sixteen-year-old daughter to an alternative school said, “We got an intellectual education in the formal education system, but I’m often sceptical if that education enriched our lives”.

Dr. Chung Yeon-sun added, “Given the current situation, where public education has been degraded to a system incapable of bringing any intellectual or emotional stimulus to students, we should expand and diversify alternative education programs so they can in turn change our public education.
“Much to my surprise I can’t really fault your theory. You are probably educationally right; certainly your argument is ethically correct.

But the system you’re arguing for would require very good teachers. We’re not convinced that there will ever be enough good teachers. So, instead, we’re going for a teacher-proof system of organising schools — that way we can get a uniform standard

Verbatim report of conclusions of presentation made to the Policy Unit at downing Street in March 1996
“We are not blind! We are men and women with eyes and brains… and we don’t have to be driven hither and thither by the blind workings of The Market, or of History, or of Progress, or of any other abstraction.”

Fritz Schumacher

“Small is Beautiful”, 1992
The most crucial location in space and time (apart from the big bang itself) could be here and now. I think the odds are no better than fifty-fifty that our present civilisation on Earth will survive to the end of the present century... What happens here on Earth, in this century, could conceivably make the difference between a near eternity filled with ever more complex and subtle forms of life and one filled with nothing but base matter.

Sir Martin Rees, 2000
Knowing what we now know we have no excuse not to create homes, schools and communities that respect the grain of a young child’s brain.

Get that right and we will be well on our way to creating earthly paradises in villages, towns and cities… always remembering that if we don’t create children wiser than ourselves there might not be a world left to worry about.
Adolescent angst

A high proportion of British youngsters suffer from a wide range of mental health issues that adversely affect:

Family life, friendships, development and academic achievement

Adolescent psychiatrist Dr. Dylan Griffiths at the Priory Ticehurst House Hospital says: “British society is much more relaxed than it was 50 or 60 years ago. The controls that the family, the
Church and other institutions traditionally exerted have vanished, leaving the young as casualties. Our culture doesn’t encourage waiting or tolerance — frustration is the norm and teens handle this by engaging in high-risk behaviours involving sex, alcohol, drugs, damaging relationships and self-harm. As a society, we need to ask: do we value adolescence and can we create a culture in which young people can thrive? If not, can we live with the fallout?"