

---

From The Times

October 26, 2009

## Why you are cleverer than you think

**Our notions of brainpower are radically changing. We are on the threshold of a new age of intelligence, says a leading authority on learning**



Tony Buzan

---

Earlier this year, it was declared that we are in the age of intelligence: 2,000 delegates at the 14th International Conference of Thinking in Kuala Lumpur embraced the fact that instead of thinking agriculturally, informationally or technologically, we will finally think intelligently. And as the year draws to an end, it seems that they were on to something. Everywhere in the world, intellectual capital has become the new buzz phrase ; people are realising that the brain is now the prime resource and the main currency is intelligence.

China has creative thinking on its curriculum, Malaysia has said its nation will be mentally literate. In Britain, Wellington College has declared it will become a beacon as a "thinking and intelligent" school, the LSE is providing introductions to intelligence and thinking skills to its new intake and tonight a Channel 4 series on race starts with a show exploring intelligence and ethnicity (see right) .

So what does it mean to be intelligent today? The notion was born at the turn of the 20th century, designed to test reading, verbal and numerical abilities. Today, people denigrate IQ test but it was only 100 years ago that we made these huge steps, to be able to determine an individuals' intelligence quotient by the level of their verbal and numerical abilities.

However in the 1960s and 1970s a number of people, including me, began to question that as an all-inclusive definition. Many people with high verbal and numerical capacities seemed to be acting unintelligently. In a social situation, they tried to dominate everything with their words and numbers and bored people to distraction. It became apparent that there was a social intelligence that was, in many instances, far more important.

The flower of multiple-intelligence theory bloomed and, as well as verbal and numerical intelligence, several other types were established. There was personal intelligence (the ability to get on with people and be your own best friend); physical intelligence (the ability to be an all round healthy individual); sensual intelligence (the ability to use all your senses); spatial intelligence (the ability to negotiate three-dimensional space and handle moving objects); creative intelligence (the ability to think flexibly at speed, originally and with volume) and spiritual or ethical intelligence (the capacity to have compassion, love and concern for others). The recent idea of "emotional intelligence" would be part of personal and spiritual.

Our notions of how to teach and nurture intelligence are also changing. The global education system was based on industrial and military revolutions: people were trained to obey and to remember things needed to survive in the factory and in the military. We are no longer in that age, nor in the information

technological age that followed.

Many schools are now embracing the intelligence revolution, teaching children first *how* to learn and then *what* to learn. Children in school now is going to be a worker. In the future, they are going to be an intelligent.

*Use Your Head* by Tony Buzan, Mind Set, £9.99

### **The big brains on the big question**

#### **Baroness Greenfield**

*Professor of Synaptic Pharmacology at the University of Oxford and director of the Royal Institution*

Intelligence comes from the Latin root *intelligere*, of understanding. Just because I know a fact doesn't mean that I can put it into a context. The more intelligent someone is, the more they can see a fact in terms of other things. The greatest form of intelligence is someone who can make big links between different contexts, such as the scientist F. M. Burnet, who applied the principles of evolution to the immune system. IQ tests might measure agility, the ability to see a fact in an abstract sense, but it doesn't require a person to see the full background or to have an understanding of history, say, or economics.

#### **Bonnie Greer**

*Critic and Deputy Chairman of the British Museum*

A few years ago, I co-won, on a points system, a contest called "The Battle Of the Brains" as part of an *Horizon* series about measuring human intelligence. There were two type of tests: the regular, conventional IQ tests and the newest, more unconventional tests coming on stream. My co-winner was a Massachusetts Institute of Technology quantum physicist descended from Bertrand Russell. This alone should tell you all you need to know about measuring human intelligence: there is no fail-safe method, no definitive rule. This is simply because we cannot guarantee that our systems of measure are perfect, infallible, true for every human in every situation. Nevertheless, we still love trying to measure each other's brain capacity. If they aren't taken too seriously, IQ tests can be harmless fun.

#### **Mary Beard**

*Professor of Classics at the University of Cambridge*

"Intelligence" quite simply equals "brain power". So can you, quite simply, measure it? Are really intelligent people the equivalent of the Aston Martin (where the rest of us are Ford Fiestas?) Happily, the answer is no. After 30 years teaching in a university, I've begun to understand that, even among the boffins, brain power comes in many different forms: from the knack of high-level theorising through razor-sharp logic to imaginative originality. There is no single scale for measuring all that.

#### **Sir Peter Lampl**

*Chairman of the Sutton Trust, which helps deprived children to get to Oxford*

Highly able children express their intelligence in many ways: the analytical skills needed to master a wide range of information and identify quickly relevant trends or issues; the communication skills needed to present facts in a meaningful way; and the people skills that are so essential for forming fruitful relationships: knowing when and what to say and to whom. Often it is the combination of all these that make people successful in life.

#### **A. C. Grayling**

*Professor of Philosophy, Birkbeck College*

The marks of intelligence are alertness, perceptiveness, wit, curiosity, creative responses to opportunities and problems, and the ability to learn quickly from errors. Intelligent people tend not to be mentally lazy or pedestrian, because being smart enough to recognise that one is either or both these things makes for dissatisfaction. Intelligent people are more often than not self-motivating and ambitious and derive pleasure from putting their talents to use. The value of what results depends, of course, on whether the intelligence in question is bent to good or bad ends.

#### **Dr Maria Leitner**

*British Mensa Supervisory Psychologist*

With regard to Mensa membership, the definition of intelligence is in fact a score on a well-validated IQ test. More broadly, there is simply no commonly agreed definition of intelligence. Most IQ tests (and most available attempts at definition of intelligence) focus on a background that ties together a set of skills. These will reflect a person's ability to problem solve, to think logically and reason; to adapt to change; to think "outside the box". One can argue that what ties the skills together is a quite primitive notion of dealing well with one's environment — that is, in evolutionary terms, having a brain that is likely to facilitate one's survival.

### **Sir Patrick Moore**

*Astronomer*

The question "what is intelligence?" is not easy to answer. It is not a case of pure scholarship; for real intelligence you have to see what lies beyond. Not everyone can do this. To show what I mean, you have only to look at some leading politicians of today. They are conventionally intelligent, otherwise they would not have risen to top positions. Yet looked at broadly they are unutterably stupid. Scholarship and intelligence do not go together, which is why this question is difficult.

### **Dame Wendy Hall**

*Professor of Computer Science at the University of Southampton*

I don't equate intelligence with cleverness. I think people who are intelligent have a touch of humanity about them. Their ideas, insight and vision set them apart from others, but they also have an understanding of what makes the world tick and how their ideas can impact for the greater good. Interestingly, as the World Wide Web has evolved so has the concept of collective intelligence, which is best encapsulated in the evolution of Wikipedia. This is a new form of intelligence that could lead to new insights into our understanding of the key challenges that face us as an increasingly global society.

### **John Humphrys**

*Journalist and Mastermind presenter*

It may be easier to say what intelligence is not. It's not being quick-witted and articulate. If it were, politicians would probably be the most intelligent. It's not knowing lots of stuff. If it were, the *Mastermind* champion would be the brightest. And it's not even being wise, which calls for experience. So maybe it's being able to see the flaw in every argument — especially your own.

### **Antony Beevor**

*Historian*

There are probably as many different definitions of intelligence as there are of beauty. Some definitions can be mutually exclusive. For example, a brilliant Asperger type of numeracy is unlikely to go with emotional intelligence. Others are interlinked, such as mathematical and scientific intelligence, which so often go with musical gifts. We now have become aware that children with learning difficulties, who in the past would have been written off as of low intelligence, can astonish everyone with talents later, as businessmen or artists. In short, we still know so little about the human brain and its development that all pigeon-holing should be avoided at all costs.

### **Anne Robinson**

*Broadcaster and TV presenter*

Intelligence is easy enough to recognise, but more difficult to define. The most critical attribute of an intelligent person is the ability to think quickly, laterally and recognise when someone is talking nonsense. Beyond that, I can only add that intelligence combined with a sharp wit makes even the ugliest bloke seem dangerously sexy.

### **Interviews by Chloe Lambert**

#### **The more I talk of intelligence, the stupider I feel**

People like me, apparently, "feel that their ability to understand and deal with their own emotions is barely acceptable". In fact I feel no such thing; actually after five years deep delving with a psychoanalyst I tend to feel the exact opposite, but this slapdown was the diagnosis following a 106-question internet test of my "emotional intelligence", which included a series of questions hypothesising about the imagined feelings of various people in photographs. In other words, I thought the test was crude bullsh\*\*, but whoever set it thought it was a fabulous diagnostic tool for a certain kind of

intelligence.

There is a great deal to be lost or gained in possessing or not possessing “intelligence”, which may be why I was so annoyed. We can easily see that *University Challenge*, for example, tests a very specific set of skills (dubbed “crystallised” intelligence by one academic, as distinct from “fluid” intelligence) and allow that many bright folk might be rubbish at quizzes. But it is much less obvious what we mean when we use the word “intelligent”, other than as a broad idea to connote the kind of mental ability we are now describing. Yet measures of intelligence are constantly being invoked. When I was a teenager battle raged around the question of IQ tests and whether they indicated genetic (or, indeed, racial) predispositions towards cleverness or stupidity. Was it the case that the poor were stupid, or that the stupid were poor? Then this pessimistic determinism was replaced by the suggestion that we were all — except in the Far East — becoming dumber. But since then the work of James R. Flynn in the US has shown that, as measured by IQ tests, we have steadily become cleverer. Allowing for the effect of the constant recalibration of IQ tests (we don’t take the same ones we did 40 years ago) Flynn’s work suggested that, in America, the mean IQ had gone up by 9.7 points over the decades, and that most of the gain had been at the lower end of IQ scores. Such an outcome seriously undermines genetic explanations for IQ, suggesting that social, cultural and technological factors are just as, if not more, important. Are we made “cleverer” because the world we live in demands that we should be? Why be clever in, say, a rural farm setting, when there is no need for it?

Why worry about being clever at all, you may wonder, if, as some claim, computers will, one day, be as or even more “intelligent” than we are? They will surpass us by 2050, someone helpfully predicted a few weeks ago. Or do we intuit that such intelligence can’t possibly compete with the deeply socialised ability of a human being to respond, often unconsciously, to the equally unconscious promptings of other human beings?

I don’t know. But it is a personal paradox that the more I talk about intelligence, the more confused and therefore the stupider I feel. Just as the emotional intelligence test said.

**David Aaronovitch**

### **The big issue that needs to be tackled**

Every decade or so, the toxic issue of whether or not intelligence is genetically distributed across the races is brought into the spotlight. There is then a huge furore, a lot of emotional accusations and then it is swept under the carpet again .

In the past I have interviewed warlords and militia leaders who have said terrible things. I’m used to and attracted by examining and putting under the spotlight people who espouse ideas and beliefs that the vast majority of us find repugnant and abhorrent. In tonight’s programme for Channel 4, I have looked at the arguments of scientists who have advanced the theories that black people are genetically, immutably, less intelligent than other races and evaluated the actual scientific evidence behind it.

Obviously, it was difficult to sit opposite scientists who were saying things that felt like a direct attack on me and my children. It is hard to stay calm, and impartial, but that is the only way to win the argument.

Quite aside from my gut reaction, I discovered that there is no knockout killer blow for those who advance this argument. The science is not there and the claims are being made by social scientists, not geneticists. The issue of why black boys, in particular, underperform, is still there, but it cannot be answered through genetics. IQ is a measure of nurture more than nature and, as one sociology professor told me, I can better tell from your IQ scores whether your mum drives a Volvo than whether you are naturally gifted at maths.

People will, doubtless, ask why we are giving airtime to this subject, whatever our conclusions. But the topic is already out there and it needs to be tackled head on, on its own terms.

**Rageh Omagh**

*Race and Intelligence: Science’s last Taboo* is on Channel 4 at 9pm tonight

[Contact our advertising team](#) for advertising and sponsorship in Times Online, The Times and The Sunday Times, or place your [advertisement](#).

**Times Online Services:** [Dating](#) | [Jobs](#) | [Property Search](#) | [Used Cars](#) | [Holidays](#) | [Births, Marriages, Deaths](#) | [Subscriptions](#) | [E-paper](#)

**News International associated websites:** [Globrix Property Search](#) | [Milkround](#)

Copyright 2009 Times Newspapers Ltd.

This service is provided on Times Newspapers' [standard Terms and Conditions](#). Please read our [Privacy Policy](#). To inquire about a licence to reproduce material from Times Online, The Times or The Sunday Times, click [here](#). This website is published by a member of the News International Group. News International Limited, 1 Virginia St, London E98 1XY, is the holding company for the News International group and is registered in England No 81701. VAT number GB 243 8054 69.

