



Children of the internet are happy to live a lie

Politicians and the media have created a post-truth world but the sad reality is that the young don't even seem to care

Fake news has an awful lot in common with online pornography. Both are Technicolor illusions that owe their appeal to looking truer than the truth. Both are threats to the supremacy of established media organisations. And both, it seems, will soon have been subject to failed attempts at regulation by people who think they know it when they see it.

In Germany, a large part of Angela Merkel's party wants to make the deliberate spreading of fake news a crime. The British government says it is "considering the implications" of the phenomenon and may not be far behind. Last month the internet unhinged itself with reports that Facebook was testing its own credibility scores for articles, until that too turned out to be fake news.

Everyone agrees that somebody, somewhere, ought to do something to shelter the public from this polluted deluge of information. The account of "post-truth" that has been told over and over again this year is that lying politicians and a lying press have abused people's trust so badly and so repeatedly that it is hardly surprising if they should seek out other versions of events.

But what if this story is wrong? What if intervening to protect people from baseless clickbait would be more than an incursion into freedom of speech — what if it might actually make things worse? A study from Stanford University suggests that the problem runs much deeper than is generally thought. The fault lies not so much in Moscow or Palo Alto as within our own minds.

The researchers found that 80 per cent of middle-school pupils could not tell an online news story apart from a piece of native advertising that had been sponsored by a bank. A third of high-schoolers endorsed a fake news tweet about Donald Trump's polling data over a genuine tweet from Fox News. University students did little better. "Overall," the academics wrote, "young people's ability to reason about the information on the internet can be summed up in one word: bleak."

The findings matter to everyone. These teenagers are the children of the internet. They have also grown up with a comparatively clean species of public life. Their political consciousness has been defined by the presidency of Barack Obama. For them, the words Watergate, Monica Lewinsky and 45 minutes are historical phrases. It is not that these young people have been jaded by decades of spin and mendacity. It is simply that they cannot — or, worse, will not — discern fact from fiction, or reporting from advertising. They do not have the mental wherewithal to find their way around the modern world.

This is unusual. For most of history the human nose for nonsense has been about as keen as it had to be. The impulse to make a bad thing sound good is probably almost as old as language, and since the emergence of the first democracy 2,600 years ago the public has been locked in a verbal arms race with the people who wanted to be their masters.

The ancient Athenians dedicated an entire science to the dissection of rhetoric. The Romans raised propaganda to an art form, with Cicero's brother publishing a treatise on pamphleteering and the emperor Augustus cladding his soundbites in marble and the hexameters of star poets. The American Revolution and the Great Reform Acts in Britain were followed by huge improvements in the education systems of both countries.

We used to keep up, more or less, with the diet of misinformation we were fed. And now we don't. The post-truth age is not an age in which politicians and journalists have suddenly begun to lie with abandon. It is one in which it no longer matters if they get caught.

What has changed? It is hard to think of an answer that does not start with the boundless and trackless ocean of stuff on the internet, and on social networks in particular. But there are older cultural forces at play, too. Over the last half-century the argument from authority has died a slow death. The simple fact that things are printed in *The Times* or uttered by a secretary of state is no longer regarded as any sort of indication that they are true.

This is not necessarily a bad thing. It was never an irrefutable argument anyway. But into its place has crept something much worse: a shrugging indifference that would be called nihilism if only it had the intellectual energy. If there is no universal authority and everything you read is flawed, you may as well just read things you agree with.

It is not truth that has died in the post-truth world: it is our appetite for truth. The only proper response is to get it back. So teach young people source criticism. Teach them statistics. Teach them about cognitive bias. Teach them the virtues and the pitfalls of expertise. Teach them to cover newspaper editorials in red pen marks. Teach them to fill their ears with things they don't want to hear. Teach them, above all, to mistrust the little voice that says something must be right — because it probably isn't.

In the end we must all be as responsible for our own critical thinking as we are for our votes. No one else can save you. Not Angela Merkel and not Mark Zuckerberg. Not some factory of penny-a-click magical realism in Macedonia. Not even David Aaronovitch. It's just you, on your own, against a fathomless tide of scarcely differentiated truths and lies, clichés and insight, omission and distortion and clarity. Best of luck.

<http://www.thetimes.co.uk/edition/comment/children-of-the-internet-are-happy-to-live-a-lie-5jm0622mw>

Niall Ferguson: why the West is now in decline

There was a time when we believed in Western civilisation. By “we”, I mean Europeans and their cousins in the colonies of European settlement, above all the United States.

You can chart the rise of that self-belief if you go to Google’s latest gizmo, Google labs, which allows you to search the huge number of books Google has scanned to date to see how frequently a word occurs in them.

In English, “civilisation” (from the French) was a term scarcely used until the later 18th century. Thereafter – not coincidentally, as European empires spread to rule more than half the world – the C word’s popularity with authors grew steadily, reaching a peak in the middle of the 20th century.

Interestingly, that peak came in the period of maximum conflict within Western civilisation, between 1914 and 1945, when writers in the English-speaking world insisted that their countries were defending civilisation against German “barbarism”.

During the Cold War, “Western civilisation” was a phrase that still resonated. In high schools and colleges all over the US, there were mandatory courses with titles like “From Plato to Nato”.

In Britain, public school boys and Oxbridge men (and it was mostly men) were expected not only to have read the classics of the ancient world (Western civilisation’s first incarnation) but also to have a good grasp of the West’s revival after the Dark Ages and subsequent rise to global dominance.

Renaissance, Reformation, Scientific Revolution, French and American Revolutions, Industrial Revolution, Electoral Reform – the big “Rs” of the West’s ascent – were noted, memorised and then “discussed” in innumerable essays.

When Kenneth Clark defined civilisation in his acclaimed 1969 television series of that name, he left viewers in no doubt that he meant the civilisation of the West – and primarily the art and architecture of Western Europe from the Middle Ages until the 19th century.

Clark’s hugely successful series defined civilisation for a generation in the English-speaking world. Civilisation was the chateaux of the Loire, the palazzi of Florence, the Sistine Chapel, Versailles.

And then something changed. After around 1960, the word “civilisation” slumped in popularity. Universities – beginning with Stanford in 1963 – ceased to offer the classic “Western Civ” history course. To the generation that came of age protesting against the Vietnam War, Mahatma Gandhi had been right when he implied that “Western civilisation” was a contradiction in terms. It was nothing more than a euphemism for a blood-steeped, bomb-dropping imperialism.

In British schools, too, the grand narrative of Western ascent fell out of fashion. Thanks to an educationalists’ fad that elevated “historical skills” above knowledge in the name of “New History” – combined with the unintended consequences of the curriculum-reform process – most British teenagers now leave secondary school knowing only unconnected fragments of Western history.

A survey of first-year history undergraduates at one leading British university revealed that only 34 per cent knew who was the English monarch at the time of the Armada, 31 per cent knew the location of the Boer War and 16 per cent knew who commanded the British forces at Waterloo. In a similar poll of English children aged between 11 and 18, 17 per cent thought Oliver Cromwell fought at the Battle of Hastings.

Throughout the English-speaking world, moreover, the argument has gained ground that it is other cultures we should study, not our own. The musical sampler sent into outer space with the Voyager spacecraft in 1977 featured 27 tracks, only 10 of them from Western composers, including not only Bach, Mozart and Beethoven but also Louis Armstrong, Chuck Berry and Blind Willie Johnson. A history of the world “in 100 objects”, published last year by the Director of the British Museum, included no more than 30 products of Western civilisation.

Yet any history of the world’s civilisations that underplays the degree of their gradual subordination to the West after 1500 is missing the essential point – the thing most in need of explanation. The rise of the West is, quite simply, the pre-eminent historical phenomenon of the second half of the second millennium after Christ. It is the story at the very heart of modern history. It is perhaps the most challenging riddle historians have to solve.

In my new book and series, I argue that what distinguished the West from the Rest – the mainsprings of global power – were six identifiably novel complexes of institutions and associated ideas and behaviours. For the sake of simplicity, I summarise them under six headings: 1. Competition 2. Science 3. Property rights 4. Medicine 5. The consumer society 6. The work ethic.

To use the language of today’s computerised, synchronised world, these were the six killer applications – the killer apps – that allowed a minority of mankind originating on the western edge of Eurasia to dominate the world for the better part of 500 years.

This is of more than purely historical interest. For it is only by identifying the causes of Western ascendancy that we can hope to estimate with any degree of accuracy the imminence of our fall.

My conclusion is that we are already living through the twilight of Western predominance. But that is not just because most of the Rest have now downloaded all or nearly all of our killer apps. It is also because we ourselves have lost faith in our own civilisation.

<http://www.telegraph.co.uk/culture/tvandradio/8362325/Niall-Ferguson-why-the-West-is-now-in-decline.html>

No, honey, you can't be anything you want to be. And that's okay.

When my son turned one, friends gifted him with an illustrated Snoopy the Dog book called “You Can Be Anything.” On page after page, this chirpy book shows Snoopy engaged in a variety of impressive professions: Sports Star, Surgeon, Flying Ace, and so on.

Dressed in the garb of his chosen occupation, Snoopy is pictured as a “world-famous lawyer,” a “world-famous literary ace,” and even a “world-famous grocery clerk.” Snoopy is superlative in everything he does.

The book was big and bright and colorful, and probably intended for an older child since the pages—instead of being thick and sturdy like board books—were made of regular paper.

When my son tried to turn these flimsy paper pages with his pudgy little hands, they inevitably ripped. Which delighted him, so he ripped them more. I let him. I even helped him sometimes.

You might think this permissiveness was due to a laid-back nature, or some lofty ideal of allowing my son's curiosity (paper rips when I pull it!) to range free. You would be wrong.

The real reason I didn't mind him ripping the pages of this book was because, as a psychologist and parent, I deeply object to its core message, which is succinctly stated on page one: “Just like Snoopy, what you can achieve is limited only by your imagination. You can be anything!”

This message—that our kids can do and achieve anything they put their minds to—can be deeply alluring to parents. What parent wouldn't want to believe that their children's achievement is limited only by imagination, and to encourage their kids to pursue ambitious goals, like becoming a surgeon or a tech company founder?

What could possibly be wrong with telling our kids they can be anything? Plenty.

First, studies show that pursuing overly-ambitious goals can be harmful. When researchers study organizations that set stretch goals for employees—goals intended to motivate high performance—they find that these lofty goals often have significant negative side effects. In particular, they find that when people are focused on a goal, and failure to achieve that goal has high costs, unethical behavior increases.

As an example, the study's authors point to the unfortunate experience of Sears, Roebuck & Co. executives in the 1990s. When the company set a high bar for auto repair sales quotas (\$147/hour), hoping that this would spur staff to higher sales and productivity, the company found instead that staff overcharged customers and recommend unnecessary repairs. As one of the researchers notes: “When employees care exclusively about reaching a goal, and bad things can happen if they fail, cheating goes up.”

It's not hard to see distressing parallels between this finding and contemporary statistics about our children. Many kids report feeling intense pressure to achieve in school and beyond, and many more kids say they have cheated. As Rutgers professor Donald McCabe, a noted authority on cheating, says: “I don't think there's any question that students have become more competitive, under more pressure, and, as a result, tend to excuse more from themselves and other students, and that's abetted by the adults around them.”

Some attentive parents may rightly point out that Snoopy's message to kids emphasizes imagination (“What you can achieve is limited only by your imagination!”) instead of focusing on the essential ingredients of effort and persistence: More important than imagining a goal is working hard to achieve it.

True, but even if the message “You can do anything!” is broadened to include hard work, it still falls short.

Telling kids that they can do anything—whether fueled by imagination or hard work—obscures the critical role of chance in success. Not every child who wants to be a surgeon or sports star can become one, even if they work hard at it. At the same time, in every success story there is the grace of good fortune. As Nobel Laureate Daniel Kahneman puts it: “Success = Talent + Luck. Great success = A little more talent + A Lot of Luck.”

While Kahneman acknowledges that skill is a key part of success, his work emphasizes that chance plays a predominant role. This can be a bitter pill for those who want to believe that we control our own destiny, and that, therefore, our destiny reflects something about our internal qualities, such as ability, drive, or worth. Implicit in this way of thinking is a different equation: Highly successful person = person with the right stuff. From here, it’s not a far leap to the notion that the haves have it because they are innately special, or because they worked hard and deserve it.

Of course, there are many who don’t work hard to develop their skills and pursue opportunities—and who therefore are unlikely to achieve success if chance comes knocking—but the reverse is not true. Just as with the proverbial wet sidewalk (if it rains the sidewalk will be wet, but the sidewalk being wet doesn’t always mean it rained) people with average resumes are not necessarily less outstanding or deserving.

In a recent New York Times Magazine article about her stardom, Oscar-nominated actor Ellen Page reflects on her brush with chance. A talent scout visited her high school, heard about her from the drama coach, and auditioned her. The rest, as they say, is history.

Page is undoubtedly a very talented actor but her talent would still exist without her great success. As the article notes: “Page wonders, sometimes, what kind of life she would be living if she had happened to be sick that day she was scouted... College, she thinks. Soccer.”

If parents promote the idea that success is primarily determined by variables within our child’s control, even such noble things as skill and effort, we are ignoring the overriding influence of chance, to the detriment of our children. When they fail at something (as inevitably we all will) children who don’t recognize the significant role of random chance in determining life’s outcomes may blame themselves or stop trying.

Conversely, those who do achieve prominent success may overestimate their role in it, and see those who have more average resumes as inferior or less deserving. On a societal level, as Malcolm Gladwell has argued, ignoring the role of chance means that we overvalue the achievements of individual stars and also miss opportunities to use our collective institutions to alleviate inequities.

I hope what Snoopy is trying to remind us is that we should not be stopped by pernicious socio-cultural stereotypes of the sort that tell girls that they can’t become mathematicians, or people of color that they can’t be CEOs. With this, I heartily agree.

That said, it’s a statistical fact that not every child can grow up to be a Supreme Court justice, a sports star, or a best-selling author. Our futures are shaped by many forces beyond our control, including chance, genetics, and other accidents of birth. Then too, statistically speaking, most of us will be average (that’s the definition of average after all).

But so what? Let’s ask ourselves why we mourn the idea that our children’s futures are not limitless. Why do so many of us dislike the idea of having average children?

As a psychologist, I see books like “You Can Be Anything” as a mirror of our own anxieties about our children’s identities and futures. I suspect that many of us harbor the secret desire that our children’s accomplishments will reflect well on our parenting, and, more selflessly, that our children’s high achievement will guarantee their well-being.

This is not to say that parents shouldn’t expect their children’s best or encourage them to work hard and persevere, just that a focus on achievement per se ultimately does kids (and ourselves) a disservice. When we create a mindset that high achievement is better than being average—that high achievers are more special or deserving—we diminish kids’ ability to value both themselves and others.

https://www.washingtonpost.com/news/parenting/wp/2016/02/18/no-honey-you-cant-be-anything-you-want-to-be-and-thats-okay/?utm_term=.addc0ef6d730

Technology destroys people and places. I'm rejecting it

From Wednesday, I'm going to live without my laptop, internet, phone, washing machine or television. I want my life back. I want my soul back

I'll never know how many people liked this article, shared it or found it irrelevant, anti-progressive or ironic. Nor will I get to read comments about my personal hygiene, or suggesting that a luddite like me needs to embrace industrialism. And that is no bad thing, for the moment writing becomes a popularity contest – rewarding sensationalism, groupthink and deceit over honest exploration of complex matters – people and places lose, and those who need to be held to account win. Win, that is, for a shortsighted moment.

The reason I won't see any web reaction is because I live in a cabin – built with spruce, oak, hands, straw, Douglas fir, stubbornness, earth and knees – without electricity or so-called modern conveniences (I've never found doing the work to buy and maintain them particularly convenient).

From Wednesday, I'm rejecting the world of complex technology entirely. That means no laptop, no internet, no phone, no washing machine, no tapped water, no gas, no fridge, no television or electronic music; no anything requiring the copper-mining, oil-rigging, plastics-manufacturing essential to the production of a single toaster or solar photovoltaic system.

Having already rejected these industrial-scale, complex technologies, I intend to move fully towards what is pejoratively called primitive technology. Insofar as engaging with civilisation allows, I'm also trying to resist the modern domination of what Jay Griffiths, in *Pip Pip*, calls clock time – and failing daily.

That probably sounds like I've given up a lot of stuff. But while I intend to be clear and honest about the difficulties involved over the coming months, especially in the digital age, I'm just as fascinated in exploring what lessons about life – myself, society, the natural world – I might learn; perhaps things my cyborg-mind cannot yet imagine. That was my experience of living without money for three fine years.

Rejecting technologies that my generation considers to be the basic necessities of life wasn't done on a thoughtless whim. I already miss not being able to pick up the phone and talk to my parents. Writing is different, my pencil unaided by both copy-and-paste and the easy delete, two word-processing functions reflective of a generic, transient and whimsical culture; and it has been a while since the media and publishing worlds worked by snail mail.

I decided to eschew complex technology for two reasons. The first was that I found myself happier away from screens and the relentless communication they generate, and instead living intimately with my locale. The second, more important, was the realisation that technology destroys, in more ways than one.

It destroys our relationship with the natural world. It first separates us from nature, while simultaneously converting life into the cash that oils consumerist society. Not only does it enable us to destroy habitat efficiently, over time this separation has led us to valuing the natural world less, meaning we protect and care for it less. By way of this vicious technological cycle, we are consciously causing the sixth mass extinction of species.

Technology destroys places. Aside from the oceans, rivers, topsoil, forests, mountains and meadows, it helps us massacre and pollute with ever-improving precision and speed, its complex set of cogs quickly spreads us out all over the world, safe in the knowledge that we can stay in touch with loved ones via technologies that offer what is really only a toxic substitute for real connection and time together. It is badly injuring, perhaps fatally, rural communities, luring their youth into industrial and financial centres – cities – whose existence is premised, as the American writer and environmentalist Wendell Berry said, on

the devastation of some other far-flung place, which consumers don't have to look at thanks to the out-of-sight, out-of-mind distance afforded by technology.

When I walk to the spring to collect water in the morning I meet neighbours and we talk. Yes, it takes time, something I found frustrating at first, but slowness only became a bad thing when time became money. Walking four miles to the post office to send my letters takes time too, but it ties me to people and place in a way that sitting in my bedroom on my own, writing endless emails, could never do.

Technology destroys people. We're already cyborgs (pacemakers, hearing aids) of a sort, and are well on our way to the type of Big Brother dystopia of the techno-utopians. And look at the state of us. Our toxic, sedentary lifestyles are causing industrial-scale afflictions of cancer, mental illness, obesity, heart disease, auto-immune disorders and food intolerances, along with those slow killers, loneliness, clock-watching and meaninglessness. We seem to spend more time watching porn than we do making love, relationships are breaking down because we stare into screens instead of eyes, while social media are making us antisocial.

Living without complex technology has its own difficulties, especially for people like me who were never initiated into those ways. But already I much prefer it. Instead of making a living to pay bills, I make living my life. Contrary to expectation, my biggest issue is not being bored, but how to do all the things I'd love to do. Of course hand-washing your clothes can be a pain sometimes, but that minor inconvenience is hardly worth destroying the natural world over.

Well-intentioned friends often try to convince me to go off-grid, but in using batteries, electrical cables and photovoltaic panels (as I once did), I would still be connected, by a peculiar sort of invisible cable, to the global network of quarries, factories, courtrooms, mines, financial institutions, bureaucracies, armies, transport networks and workers needed to produce such things. They also ask me to stay on social media to speak out about the technology issue, but I say I'm denouncing complex technology simply by renouncing it. My culture made a Faustian pact, on my behalf, with those devilish tyrants Speed, Numbers, Homogeneity, Efficiency and Schedules, and now I'm telling the devil I want my soul back.

My life has its fair share of irony, and it can look hypocritical. Despite originally writing these words (a technology) with a pencil (a technology) in a hand-crafted cabin (a technology), the irony of this being an online blog is not lost on me. That is my compromise for now, for if you want to contribute to a healthier society, compromise can be a healthy thing if you know your boundaries. Being a hypocrite is always my highest ideal, as it means I've set higher standards for myself to strive for than I'm achieving at any one moment.

We know that, at the very least, some technologies are harming our natural world, our societies and, ultimately, ourselves. Therefore we can recognise the need to reject some technologies. If we're to avoid technological extremism we're going to have to draw a line in the sand somewhere. I've drawn mine, and I will only move it in the direction of my home.

<https://www.theguardian.com/commentisfree/2016/dec/19/life-without-technology-rejecting-technology>

‘We’re not hippies, we’re punks.’ School that has projects, not subjects, on the timetable

Finland’s answer to a slip in standards is to put more ‘joy’ into the curriculum. We visit a school in Yorkshire that aims to show the UK could do the same

‘New core curriculum for basic education emphasises the joy of learning,’ reads a recent headline on a government education website. This new, more joyful curriculum, it says, is based on “positive emotional experiences, collaborative working and creative activity”.

It is, of course, the Finnish Board of Education’s website. Finland has given its schools a new curriculum with a reduced subject content and is encouraging them to teach to “competences” through project-based learning. In England, the Department for Education’s initiatives on standards tend to focus on league tables and school structures – such as more grammar schools.

For years Finland came top of international tables in literacy and numeracy, but it has been slipping in recent years. A comparative study published in December showed Finland 12th in the international league for maths, behind the Netherlands and Canada, among others.

The response, in a country that has long had a reputation for training high-status teachers and then trusting them to provide high-quality child-centred learning, has been to encourage a more radical, more multidisciplinary approach.

Could it happen in the UK? The short answer, of course, is no. The very notion of project-based learning tends to enrage the political right – Finland’s reforms have been characterised in Britain as the ditching of traditional subjects. And a recent small-scale study that struggled to find positive results from the method led to a minor Twitter-storm, with the schools minister, Nick Gibb, and other senior Conservatives weighing in to highlight the news.

And yet, quietly, dozens of schools in England are implementing a system that has many similarities to the one being introduced in Finland. Joy seems to be a major element.

Take the XP school in Doncaster, South Yorkshire. Set on an industrial estate next to a Tesco distribution centre and behind a forbidding security fence, this three-year-old free school doesn’t look like a place designed to focus on positive emotional experiences. But its co-founder and CEO, Gwyn ap Harri, confesses to having regular wobbly moments.

“We cry a lot,” he says. “And we aren’t hippies – we’re punks! We’re from Yorkshire. But we see stuff that ... stuff we haven’t seen before. When you see kids leading a prospective parents’ evening after six weeks, with no teachers, and they talk so eloquently about the school and how it works ... it’s just incredible. Parents come in saying: ‘I can’t believe what’s happening to my kids – they’re growing up in front of my eyes’.”

The school was inspired by visits to High Tech High in San Diego, California, which has been working on a similar system for many years, and has elements of a programme called “expeditionary learning”. It’s very different from most UK schools. They don’t like to use the terms “traditional” or “progressive” here, but there are no uniforms; we count four pupils in Superman shirts.

Although all the main subjects are covered, only Spanish is taught as a separate lesson. Everything else is taught through “expeditions”, or projects, always with some external involvement. This term pupils will be working on a design brief from English Heritage to make posters for its education room at the nearby Conisbrough Castle.

In a year 7 classroom today, Jack and Emilly are working together on a book based partly on interviews with former miners, a project on Doncaster's mining heritage. It's opened up personal, as well as educational, journeys. "Especially with my grandad being a miner," Jack says. "Until we started doing this expedition he's never said much about it, but now I've asked him questions. I didn't know about the strike."

Emotion seems key to what's happening here – asked to talk about their school, Jack and Emilly are effusive: "If I went to a school that was normal, I would get the feeling when I walked in that it was like a school ... but here I don't get the feeling it's a school," says Emilly. "I think it's like a house," Jack adds. Emilly nods: "The students and teachers are really close – like our second family."

The school hasn't had a full Ofsted inspection yet but it has had five HMI visits and is expecting one any day. The indications are that it will do well – everything the children do here is mapped against national curriculum goals and progress is carefully charted against national norms.

But it isn't easy, Ap Harri confesses. "People ask: 'Why isn't everybody doing it?'" he says. "I say it's obvious. It's really hard, it's complex, it's scary. You've got to put your professional life on the line. But we're prepared to do that."

At XP, they say they've had to work harder than others just to convince officialdom that their approach is sufficiently rigorous to justify funding: "In order to talk about our post-16 provision, I produced a 155-page document for the DfE," Ap Harri says. "You have to do more than other people."

Those who support the development of project-based learning on a national level say there are major problems with its implementation in a system that focuses on standardised assessments and inspections.

David Price, a senior associate with the Innovation Unit, a social enterprise working with schools to encourage different styles, says many UK schools struggle with project-based approaches.

However, Ofsted does not have a view on project-based learning and has rated another project-based school, School 21 in London, as outstanding. But Price believes when the pressure is on, heads tend to retreat to traditional structures. "Innovation is being driven out of the system by fear of what it might mean when it comes to Ofsted," he says.

The trial that recently excited negative comment suffered because a large number of participant schools dropped out during the process, he says. "What's coming from schools is they think when they are being pressured by Ofsted and have to get exam results up, they do spend huge proportions of time concentrating on literacy and numeracy."

In English government circles there is deep scepticism. Sam Freedman, executive director of programmes at Teach First and a former senior adviser to Michael Gove, says the evidence for project-based learning is weak, particularly for pupils from disadvantaged backgrounds. "This is not to say it can't work, or that some schools aren't using it effectively," he says. "But I would advise any school considering building a curriculum around project-based learning to tread cautiously and read the available studies."

Despite queasiness in some quarters about a possible retreat into 1960s liberalism, Ap Harri has no doubts: "You show me a school that plans its curriculum in a more rigorous way," he says. "I won't believe you until I see it. There's a lot of stuff in education saying you can have an engaging curriculum or you can have a rigorous curriculum. You can do both."

<https://www.theguardian.com/education/2017/jan/31/school-subjects-timetable-finland>