

FUTURE SCHOOLING

THINK PIECE 1

'THE FUTURE' AND HOW TO USE IT

THINKING ABOUT CHANGE

When asked to think about schooling for the future, most people – perhaps especially after the COVID-19 Pandemic, frame their thinking in terms of new technology, digitised classrooms, distance learning and perhaps more personalised approaches to learning. This think piece argues that what is needed now though is a shift away from a somewhat passive attitude to the evolution of schools and schooling; to a more active choice-driven approach centred on the question “What are the schools we want to see emerge in the coming, say, 30 years?” To answer that question meaningfully requires the consideration of the nature of the future itself which will then enable us to address what future do we think schools should be designed for? However, how can we possibly predict what it will be like in 30 years’ time and what do we know now about the likely direction of travel to get there?



At this point it is generally conventional to state that the future will be VUCA (volatile, uncertain, complex, ambiguous). In truth, that is of little help. The take-aways tends to be that either young people need to learn to be resilient or one is confronted by endless lists including such well-evidenced issues as:

- **Increases in migration**
- **Complex globalization (or its reversal)**
- **The threats to liberal democracy and the loss of trust**
- **Instability of the financial system**
- **The rise of fake news: truth and expertise in retreat**
- **Radical extremism**
- **Inequality**
- **The 4th Industrial Revolution**

I would describe these as surface-level trends. Not because they are trivial – far from it. We need to be conscious of them, for sure, but they can be transient, even reversible in quite short time-frames. Furthermore, they tend to be negative or threatening. As Hans Rosling has shown in his work (especially in his 2018 book *Factfulness*¹) many aspects of our world are getting better and we lose sight of this in the turbulence and change.

I believe that we should adopt a wider lens with a focus on the deep structure changes affecting our future rather than the surface level ones.

Given the state of knowledge of the field (due in part to unprecedented computing power and big data) I see 3 big inflexion points, or pivots in history, which characterise the future. The nature and scale of these changes are *literally* unprecedented in human history. Taken together, these inflexion points comprise both immense opportunity and possibility, as well existential threat both to humankind and our planet.

The first is of our **planet being at a tipping point**. Three major drivers comprise this phenomenon. The combination of the climate crisis, the effects of the Anthropocene Age (the current geological era of time in which the activities of humankind are influencing the very structure of our planet); and the 6th Great Extinction (with profound threats to biodiversity) brings us close to the point where the ecological balance of our planetary home can no longer support civilization.

OUR PLANET AT A TIPPING POINT?



These three drivers are distinct but closely related. Whilst, fortunately, the climate emergency is at long last gaining the needed level of public attention, the impact of the other two drivers – especially the catastrophic loss of bio-diversity through the 6th Great Extinction – cannot be overstated. Moreover, one consequence of this dysfunctional relationship with other species and natural ecosystems is of course the increased potential for zoonotic pandemics. Unless focused action and leadership shift our current direction of travel, the consequences are potentially terminal. Perhaps that is why in general people prefer to look away – it is, as Al Gore so powerfully pointed out, *An Inconvenient Truth*.² It may now be less easy to look away since the consequences of the COVID-19 zoonotic pandemic have left no-one untouched.

It is impossible to over-emphasise the importance of this potential pivot. It says much that it took a 15-year-old Swedish girl called Greta Thunberg to bring millions onto the streets to concentrate minds. Many nations have already been dealing with the consequence of the crisis for the last 10 years and have failed to achieve a concerted response from the rest of the world. We face the choice between a liveable (though fundamentally altered) future, or a dystopian one. So one question is: what's the implication for future schooling – and for schooling now?

The second tipping point, or inflexion in human history, is the **apotheosis of technology**. The research literature suggests this has 3 elements: job disruption by robotics (possibly the arrival of 'post-work societies'); the emergence of artificial intelligence (as simultaneously an immensely powerful tool and potentially a threat to humanity as we know it); and thirdly, an astounding global connectivity. The latter is comprised of a planet-wide communications grid connecting the thoughts of billions of people at ever faster speeds and linking them to exponentially expanding volumes of information at an even faster pace once 5G technology becomes established. Some writers describe this emergence as the arrival of '*Big Mind*', or genuinely collective intelligence.



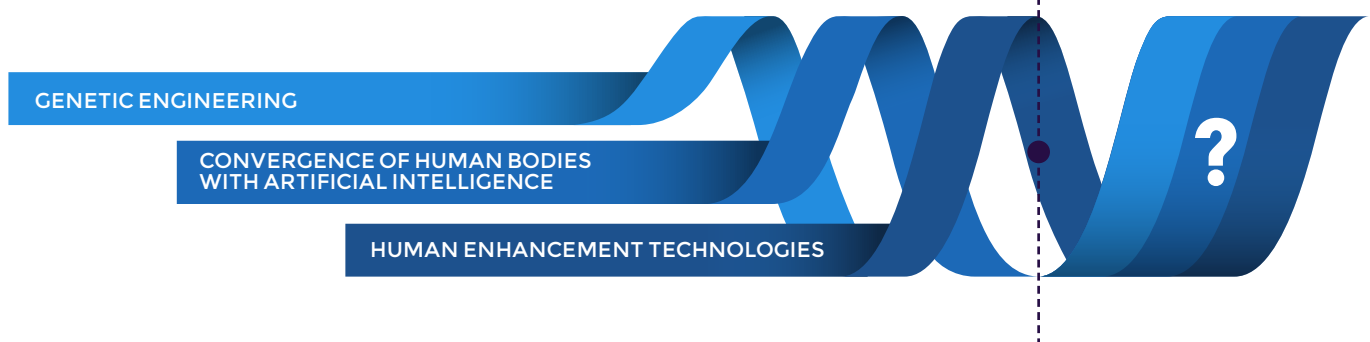
TECHNOLOGY IN CONTROL?



It can readily be appreciated that the implications of all this go way beyond injecting more technology into schools. Firstly, it is in part through the application of *Big Mind* (collective intelligence or CI) that some of the problems on Pivot 1 will be addressed. Second: these shifts entail massive societal consequences regarding how we work, live, travel, meet, and relate to each other. The developments have the potential to create spectacular progress in improving the quality of life and mitigating suffering of the poor, vulnerable and marginalised. And they also hold dangers. These include, amongst others, the concentration of immense power in the hands of a very few vast global tech companies due to their accumulation of data on every aspect of our lives public and personal. With this goes the potential capacity to shape our views and our behaviours.

The third inflexion point is the emergence of **our species' capacity to influence our own evolution**. The convergence of the life sciences with nanotechnology and robotics has created the capacity for us to reshape the very fabric of human life: to overcome biology. Developments in genetic engineering, and in human enhancement technologies are combining to bring in prospect changes to our very nature. Some anticipate the arrival of *the singularity* as theorised by Ray Kurzweil³ and others. As Klaus Schwab from the World Economic Forum suggests it is changing not just what we do, but *who we are*.⁴

NEW HUMANS?



Actually, there are some scholars such as Noah Nuval Harari⁵ who maintain that, because of these developments in our own emergence, we are leaving the Anthropocene Age behind us and that the dawning of the Novacene Age is discernible. The emergence of new beings from existing artificial intelligence systems will create a new dynamic with the planet. If this is too much like science fiction for you, well, the principal exponent of this theory is James Lovelock⁶, an extremely eminent scientist, who has a considerable track record in being right. Leaving aside this speculation, what is evidentially the case is that humans are moving into a new phase (if they can survive on the planet) whereby our species' evolution can be intentionally affected by humans themselves.

3 Kurtzweil R *The Singularity Is Near: When Humans Transcend Biology* Viking 2005

4 Schwab K., *The Fourth Industrial Revolution* New York 20165

5 Harari Y. N., *Homo Deus: A brief history of tomorrow* Harvill Secker 2016

6 Appleyard B., and Lovelock J., *Novacene: the coming age of hyperintelligence* Penguin 2016

I have highlighted these as pivot points because they are unprecedented in human history. There has quite literally never been such a set of profound changes. They are the shifting tectonic plates, the big picture against which other change dynamics must be seen. They are the deep-structure shifts.

Opportunities sit beside great threats, however. The actions that we (and particularly the young) take in the coming decades will be critical. It is as fallacious to resign to an apocalyptic future as it is to pretend that the future will be like the past. But we should recognise a change in the zeitgeist. There is now a widespread sense of dread about the future. Where once there was optimism, many of the young seem drenched in pessimism.

The Future School then is one that is *consciously attempting* to prepare its learners to address some mix or permutation of these features. It is not one that sits in business as usual. A later think-piece in this series goes into some detail about future school design. Those designs are focused on enabling learners to thrive in the range of scenarios that the change features present. And thriving means not just reacting to - but also *shaping* the future. Some describe this as 'occupying the future'. Douglas Rushkoff⁷ for example, in his book *Present Shock* says that the future is not a noun, not a destination, it's a verb.



DEPLOYING 'FUTURES WORK' – BECOMING FUTURES LITERATE

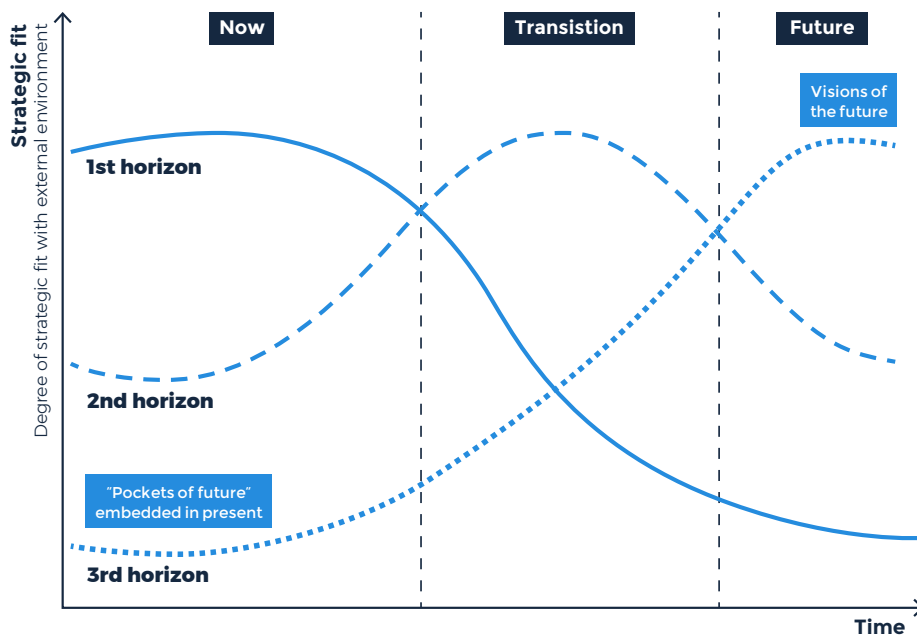
The central argument of this think-piece is that education leaders – whether political, system or institutional – need now to become futures literate. In the aftermath of the COVID-19 pandemic in particular, this means becoming not just aware of change, but also being capable of utilising, tools and approaches which go beyond the usual essential coping mechanisms. In the UK, for example education leaders are working through a number of immediate challenges facing them. These are:

- **economic** - funding their systems in the face of the consequent economic recession post COVID-19
- **social** - addressing the even greater inequities that have arisen during the COVID-19 pandemic period,
- **new levels of mental health issues**, and,
- **the significant widening of the educational gap**

However, these systemic shifts are not confined to education. Almost every aspect of life seems set to change as a result of the 2020 pandemic crisis. The pull to return to 'normal', to 'get our lives back' is extremely strong. So much has been lost; so much disrupted. Some of that disruption has been wholly negative. But the smart thing to do will be to use the disruption to step back and take a long look at how we might seize opportunities before shutting down too many options. How can leaders ensure that education becomes, not just more adaptable to future conditions, but also capable of enabling young people to shape them?

I believe that the intelligent use of futures thinking may help. This of course is in addition to many other forms of expertise – foremost amongst which of course is the application of new knowledge about learning. The latter has for too long lurked in the margins of thinking about our schools, but been seriously applied only too infrequently. For instance: how far are the new understandings about growth mindsets, about collaborative learning or the emotional dimensions of learning taken really seriously? As schools reopen after periods of shutdown, we have the opportunity to reassess how such knowledge can be applied to the design of the schooling experience.

But this is in the short term. We already have the tools (the research, the examples) to utilise these insights. But leaders now need to be thinking about future horizons beyond the immediate recovery phase. One way to visualise this is through the 'three horizons'.⁸ This framework invites leaders who engage with it to consider the dimensions of each horizon *now*. In terms of education and the COVID-19 pandemic, the immediacy of response (setting up distance learning, supporting those digitally disadvantaged, staff safety and welfare etc) was horizon 1. Necessarily, this remains within the existing paradigm. Arguably horizon 2 is what will be ongoing in the immediate aftermath years – the 'transition' space, where innovation can be explored. This can be a transitional period, where genuinely new approaches can emerge. In the case of schooling, they might include experimenting with different uses of precious face-to-face time; conferring greater learner agency in terms of study organisation; the adaptation of new methods of project based learning.



But the third horizon is truly about the construction of a new future. It is on this that the futures literate will focus. This is where those in leadership roles need cognisance, not only of the immediate surface-level shifts that are visible, tangible and that disrupt and confound but also of those deeper structure pivots discussed in the first part of this think piece. This is where the entrepreneurial can utilise 'pockets of the future visible in the present'. Quite often, potential responses to such deep long term trends will seem too visionary for immediate implementation, but they will contain the seeds of the new Horizon 1. To take one example: leaders who fully get the profundity of the first 'pivot point' described above – Our Planet at a Tipping Point – are already wholly redesigning the schooling experience to empower young people to reshape our relationship with the planet, in terms of their curriculum, pedagogy, assessment, community partnership and much else besides.⁹

Futures thinking can grow the ability to comprehend change. It can help to overcome fear and inspire hope. Hopefully, 'futures literacy'¹⁰ will become a key leadership competency both now and in the future. Futures studies is itself an academic field and discipline with peer reviewed journals with a rich literature. I'm not proposing that education leaders should become immersed in a whole new academic discipline; but rather that they make use of the support and resources tailored for education, that are emerging from these workstreams. There is a wide range of important organisations across the world engaging in this work focused on education.¹¹ They offer a variety of resources to support leaders to engage productively in futures thinking and become futures literate. The challenge is to make this work accessible and adoptable universally.

8 Sharpe, B (2013) *Three Horizons: The Patterning of Hope*. Bridport: Triarchy Press.

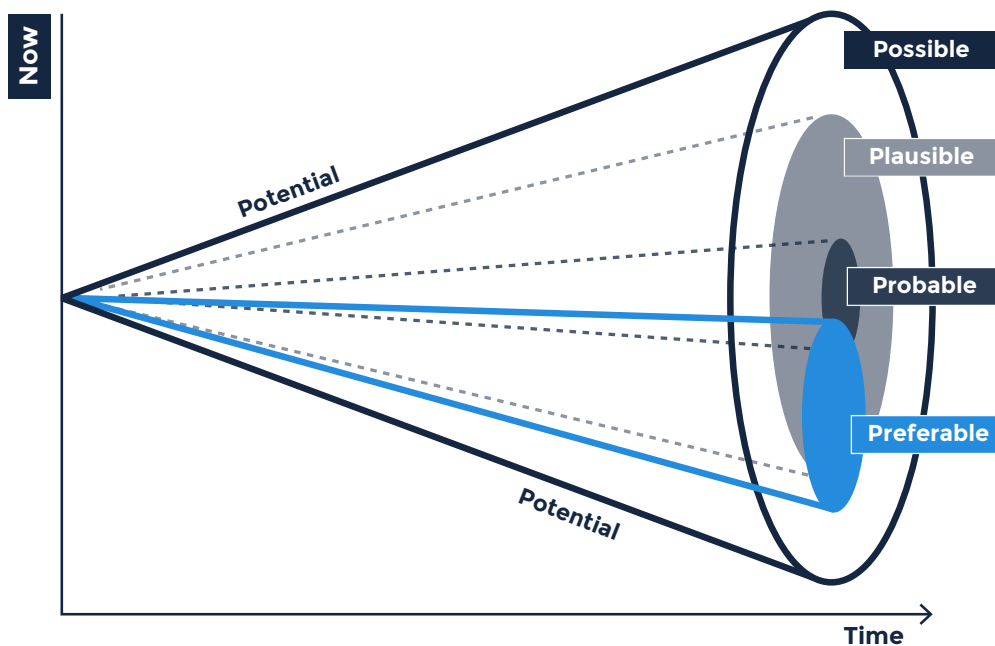
9 See for example The Green Schools (Indonesia, New Zealand and South Africa) <https://www.greenschool.org> described in Hannon (forthcoming) *The Future School*.

10 Defined here as *the capability of using insights about the future to innovate the present*.

11 For example, UNESCO <https://en.unesco.org/futuresofeducation> ; WISE (World Summit on Innovation in Education) <https://www.wise-qatar.org> ; OECD <https://www.oecd.org/site/schoolingfortomorrowknowledgebase/futuresthinking> ; and KnowledgeWorks <https://knowledgeworks.org/resources/forecast-5>

It is very important not to think about futures work merely as prediction. Naturally there are *elements* of prediction: what are trends telling us – barring wild cards – will happen unless there is a conscious decision to take action? One thing we do know for certain is that the future rarely turns out exactly as predicted. But the key is to empower people – whether they are leaders, teachers or learners in schools to take up the task of shaping a *preferred* future out of the intersection of the possible, the plausible and the probable. One can visualise this as a ‘Futures Cone’.¹²

THE ‘FUTURES CONE’



Amongst the approaches that are helpful in this work is the use of scenarios. The OECD was an early developer of this technique for education, embarking in 2006 on a collaborative programme of work with the then National College for School Leadership. In its latest publication¹³ it offers a set of four scenarios for the future of schooling. They are set against the wide landscape of change we have already considered. The scenarios are:

- **Schooling extended**
- **Education outsourced**
- **Schools as learning hubs**
- **Learn-as-you-go**

Again, these are not to be used as predictions, but rather they are to be seen as sets of plausible alternative futures based on cues for change which are already visible to eyes of the futures literate. They are offered to educators as the possible rather than the probable in order to provide a basis for intelligent, informed dialogue. Exploring scenarios is a useful method for navigating the zone of plausibility, and working towards a preferred future. The point is to create that dialogue. That can be done by looking at each scenario and assessing its likelihood; considering the threats and opportunities each one presents; asking what new options present themselves.

¹² Voros, J. (2017) *Big History and anticipation: Using Big History as a framework for global foresight*. In: R. Poli (ed.) *Handbook of anticipation: Theoretical and applied aspects of the use of future in decision making*. New York: Springer International.

¹³ OECD 2020



CONCLUSION

Futures literacy may appear at first blush to be an unnecessary additional burden to impose upon already hyper-stretched education leaders. But education is nothing if not about conferring a legacy upon the next generation to enable them to shape the future they want. The responsibility is upon us to do the work; it has been described as 'being a good ancestor':

Becoming a good ancestor is a formidable task. Our chances of doing so will be determined by the outcome of a struggle for the human mind currently taking place on a global scale between the opposing forces of short-term and long-term thinking. The great silent majority of future generations is rendered powerless and airbrushed out of our minds.¹⁴

We should be clear that **not** undertaking the work of incorporating futures thinking into education means making a choice: it's a decision, a bet that the future will be like the past.

Where do you place your bets?

FURTHER READING

- Gore A. *The Future.*, Random House. 2013
- Hannon V and Peterson. *AK THRIVE: the new purpose of schools in a changing world.* Cambridge University Press. 2021
- Hannon V with Temperley J., *The Future School* (forthcoming).
- *Back to the Future of education: four scenarios for schooling.* OECD Paris. 2020
- Smith S. *How to Future.* Kogan Page. 2020

¹⁴ Krznaric, R. (2020) *The Good Ancestor: How to Think Long Term in a Short-Term World.* London: WH Allen.