



Facer, K. (2018). Governing Education Through Anticipation: Or, how to avoid being a useful idiot when talking about educational futures. In L. Rasmussen, & I. Grosvenor (Eds.), *Governing Education Through Design* (pp. 197-210). (Educational Governance Research; Vol. 9). Springer, Cham. https://doi.org/10.1007/978-3-319-97019-6_10

Peer reviewed version

Link to published version (if available):
[10.1007/978-3-319-97019-6_10](https://doi.org/10.1007/978-3-319-97019-6_10)

[Link to publication record in Explore Bristol Research](#)
PDF-document

This is the author accepted manuscript (AAM). The final published version (version of record) is available online via Springer at https://link.springer.com/chapter/10.1007/978-3-319-97019-6_10 . Please refer to any applicable terms of use of the publisher.

University of Bristol - Explore Bristol Research

General rights

This document is made available in accordance with publisher policies. Please cite only the published version using the reference above. Full terms of use are available:
<http://www.bristol.ac.uk/pure/about/ebr-terms>

Governing education through anticipation or... how to avoid being a useful idiot when talking about educational futures

Keri Facer, School of Education, University of Bristol

Cite as Facer, K (2018) Governing education through anticipation or... how to avoid being a useful idiot when talking about educational futures in L. Rasmussen and I. Grosvenor (eds) *Governing Education Through Design*, London: Routledge

Governing education through anticipation or... how to avoid being a useful idiot when talking about educational futures

Keri Facer, School of Education, University of Bristol

Introduction

School buildings, as this book has clearly demonstrated, are central to the governance of education. Their design regulates bodies, movement, interaction and expectations of what might or might not be possible in these sorts of spaces. But what governs the design of school buildings? What shapes the educational imagination that specifies the size of classrooms, the expectations of how many students will be in these spaces, the assumptions about the school's role in relation to community, the presence or absence of computer suites?

In this chapter, I want to argue that ideas of 'the future' are central to the educational imagination that shapes building design. A building, after all, is what de Jouvenaal called a little 'jetty into the future'. It is a material intervention in the present that is intended to last beyond the moment, to sustain into another time that is not now. School buildings are therefore doubly entangled in the ongoing dialogue between education and the future – they are both imagined as mechanisms for governing education and the individual and social futures that will emerge from that educational practice; *and* they are also intended, in themselves, to continue as material actors in those futures.

Nowhere was this idea of school buildings as material actors in social futures more evident than in the UK's (2003-2010) Building Schools for the Future Programme where schools were envisaged not merely as educational institutions, but were to stand as highly visible signifiers of the role of knowledge and learning in the transformation of local communities to a future knowledge economy (Kraftl, 2012). In this chapter, then, I want to explore the relationship between ideas of the future and the educational and architectural imagination that underpins school building design, with a particular focus on the example of the UK's Building Schools for the Future programme. In doing so, I want to highlight the limits of contemporary approaches to using the future in educational governance and explore, instead, what it might mean to take the complexity of 'the future' seriously in the design of educational buildings.

Building Schools for *which* futures?

The Building Schools for the Future programme was one of the UK New Labour Government's flagship policies at the turn of the millennium. A £45bn initiative intended to run over 15 years and restore over 300 of the UK's schools, this massive programme was presented as nothing less than a transformative intervention into the educational and social life of the country. As Kraftl (2012) argues, this manifestation of government policy in buildings was '*an attempt to literally and figuratively concretise the promise of national-scale dreams of transformation.* (2012:855).

How the bricks and mortar intervention would actually lead to this broader social transformation, however, remained unclear. As Kraftl goes on to argue, there was a significant gap between the present realities of schools and communities, and the future

transformation that was proclaimed. And indeed, this vagueness about the path between today and tomorrow both *'provided room for other, increasingly controversial processes— not least the funding of public building work via private business finance (PFI).'*' (Kraftl, 2012) and made local authorities, school students and schools themselves, increasingly responsible for, although poorly equipped to influence, the outcomes of the investment.

Critically, Kraftl argues, the BSF programme was a moment at which *'dreaming about the future became politically acceptable'* (855). Responsibility for translating these dreams for the future into school building design fell to Local Education Partnerships – comprised variously of private sector companies, school representatives, local authorities and others. The national guidance for school design ranged from highly detailed instructions on classroom specifications in the infamous BB98 document, to a suite of 'inspirational' classroom designs developed as pilots to encourage schools to think differently. Into this morass of specification and inspiration that filled the gap between the present and future transformation entered a number of new social actors – think tanks, research labs, commercial research agencies and consultancies – all seeking to promote particular visions of educational futures and to 'help' local education partnerships to make decisions.

At that time, I was research director for a small organisation called Futurelab, a hybrid think tank/research lab funded primarily from the Department for Education and established through the National Endowment for Science, Technology and the Arts (NESTA), a New Labour Initiative set up to promote innovation through dialogue across different sectors. Futurelab, alongside more established research labs such as Ultralab at the University of East Anglia, the think tank Demos and Microsoft's international Partners in Learning Team team, entered the BSF arena with some enthusiasm seeking to use the BSF programme as an opportunity to rethink educational assumptions. This is equivalent to the Brookings Institute, the Centre for Digital Media and Learning at Stanford and the Ganz Cooney Centre in New York all getting involved in a national buildings programme. These different actors often found themselves coming together at national events – from the BETT show (the annual technology/suppliers show) to collaborations around particular consultancy activities. Sometimes forming formal partnerships, other times informal coalitions to collectively inform political agendas and at times, actively disagreeing and competing for both influence and resource. Notably, the Kent Local Education Partnership developed a detailed outline of what Building Schools for the Future might look like on the ground by bringing together both Microsoft and Stephen Heppell (formerly Ultralab Director) and through informal conversations with Futurelab.

These actors were working with different analyses of contemporary issues and possible futures. Futurelab and Ultralab drew on a combination of traditions of progressive alternative education (from Ivan Illich and Colin Ward) and constructivist visions of self-directed, technology enhanced learning (from Seymour Papert, Negroponte et al). Demos, in contrast, were concerned primarily with a wider public services transformation in which education, health and other services would be increasingly 'personalised' and guided by the interests, needs and trajectories of individual citizens rather than offering a standardised 'one size fits all' approach. While Microsoft were positioning themselves as a significant education actor in the UK, looking to use the BSF programme as a global shop window for the widescale adoption of ICT in education. These ideas were being discussed in the context of a wider educational reform agenda that saw the Qualifications and Curriculum Authority (the national policy body responsible for setting the National Curriculum for schools) framing curriculum around a set of 21st century skills and competencies as well as national pedagogic and curriculum experiments being led by the Innovation Unit (a department set

up by the Labour Government to facilitate innovation in education) and the Royal Society for the Arts, Manufacture and Commerce (a centuries old membership organisation) around cross-curricular teaching, 'real world' learning and core competencies. In this heady context, and with the support of £45bn worth of planned investment, it was hard not to agree with the claim in Kent's BSF document that *'Within 10 years the nature of schools and learning will be fundamentally different from today'*

When we today unpick the sorts of futures envisaged and on offer in these documents, however, it is clear that these processes were suffering from a profoundly impoverished and poorly articulated set of assumptions about 'the future' for which these schools were being imagined and built. Not only were the school designs being constrained from the outset by national standards that prespecified the existence, size and purpose of classrooms but they were also typically shaped by a set of international standard architectural tropes that were pulled off the shelves in the initial stages of planning before any consultation was conducted (den Besten et al, 2011) These standards precluded radical or imaginative thinking about questions such as whether schools themselves continued to be the best place to educate young people, about the composition of teachers and students in schools, about the relationship between face to face and online interactions, about the relationship between educational, social and economic inequalities. Moreover, the design process was dominated by a single orthodox view of the future economic landscape and education's purpose within it. As the Microsoft/Kent County Council document proclaimed, without blushing: *"The world is flat - the context is a globalised economy: The fundamental aim of the BSF investment is dramatic improvement of learning and achievement to secure our future in the global, post-industrial, knowledge age economy"*(p2)

What is clear when we look at the work of this period is that the fundamental ontological fact about the future – its potential for generating novelty – was only rhetorically invoked in these documents with a broad nod to 'uncertainty'. Indeed, what characterised the discourses of the future that shaped BSF initiatives was, as with much political and public discourse of the period (Webster, 1995) the idea of the future as a radical economic transformation from an 'industrial' age to an 'information age'. Consider, for example, the assumption of entry into a radically different era in the following statement from the Kent/BSF plan:

The industrial age model is recognisable in phrases that imply uniformity, such as 'we must have a shared vision'. Our very phraseology must change. 'Our vision must work for everyone, whatever their starting point'. (p8)

Critical to this particular vision of the 21st century future for which these schools were being imagined and designed, was a new vision for ICT. Indeed, digital technologies were used throughout the programme in a talismanic role, to signal the difference between today and tomorrow. ICTs were to be the new '5th utility' – transforming, according to the Kent/BSF proposals, all areas of learning. The digital was used as a proxy for transformation and as the ultimate symbol of a new age. Other futures – of environmental disruption, of the continuation of long-term trajectories of embedded inequalities, of radical demographic shifts, of changing cultural, ethnic and religious beliefs – are simply absent from the discourses framing the programme.

Both Ultralab and Futurelab, as consultants and researchers working in this area, made some attempts to disrupt this monocultural and economically dogmatic account of educational futures. Ultralab's *'Building Learning Futures'* report, in particular, opened with

an explicit account of the impact of poverty on children's educational life chances and went on to identify four diverse potential future scenarios for schools which included the radical proposal that no school at all might be required. In a related vein, Futurelab's *'What if... reimagining learning spaces'* report proposed learning scenarios that ranged from autonomous learning to educational institutions integrated within communities. Such visions, however, while useful for stimulating research discussions and early stage consultation, very rarely gained any traction in the programme as a whole. Moreover, these alternative visions never went so far as to fundamentally challenge the underpinning economic assumptions of the dominant ideas of the future in the programme. Rather they relied on the idea that the widespread use of creative digital technologies might support student empowerment in a way that would radically disrupt the practices of schooling.

In the 10 years that have passed since this heady period, the shortcomings of the myopic economic narrative that underpinned the BSF programme are clear: mass migration, social unrest, environmental disruption, continued economic fragility, not to mention the rise of populism and the decline of social trust, all demonstrate that the idea of a shift towards a seamless global knowledge economy was profoundly (as was pointed out at the time) misguided and impoverished as a vision for educational change.

At the same time, however, the limitations of the 'alternatives' that many of us were proposing at the time have also become clear. These alternatives, which were premised upon the idea that digital technologies should be used in school to support learner autonomy and agency, arguably achieved little more than to justify the introduction into schools of digital accounting systems that have come to both responsabilise and punish learners. The radical potential that many of us perceived at the time for a new approach to education has instead been co-opted within educational processes that mobilise digital technologies to intensify the surveillance and capture of individual learners within ever more narrowly defined curricula and educational goals.

Indeed, Livingstone & Sefton-Green's recent (2016) ethnography of student experiences in contemporary classrooms documents how today at least 10 data entry points are captured about each child in school everyday, how a language of highly competitive individual comparison has become commonplace in classrooms, and how the language of education has been colonised by the language of measurement and metrics. On this basis, it is tempting to conjecture that the so-called 'alternative' future visions that many of us sought to use to mitigate the narrow perspectives of the BSF debate did little other than to offer an acceptable 'cover' for the wholesale reduction of education to techno-centric preparation for employment.

Consider the 'Learning Gateway' in Kent, for example, that was a central part of the wider Kent vision for a transformation towards a personalised learning experience for all students, offering opportunities for students to access information, tailor resources and shape their learning environment around them. Today it is now clearly reduced to a means of student documentation and surveillance that engages parents in the process of monitoring and documenting student participation in ever more authorised learning activities in the home. Rather than supporting a brave new world of collaboration and empowerment, these technologies have been appropriated to capture young people ever more tightly in a net of education practices that promote constant surveillance, competition, individualisation and privatisation. Those of us who thought to use the discourses of transformational change and technology enabled futures to open up, critique and disrupt the dominant discourses of education were arguably no more than useful idiots in a process that has served to more

effectively and efficiently capture education within the discourses of managerial control. Indeed, as has been discussed elsewhere (Facer, 2012; Lupton & Williamson, 2017), the introduction of digital technologies has in the main served to support the ongoing reframing of educational governance as a process of systematic intervention in the data profiles of individuals and groups of children.

Working differently with the future in educational design

What lessons might be learned from these experiences about how ‘the future’ might be used differently in the educational imagination that governs school building design today?

1. It’s not all about technology

Writing at a time when issues of migration, populism, economic austerity, race hate and the break-up of Europe are top of the agenda, the framing of educational futures around technological innovation a decade ago looks both naïve and shortsighted. The futures students are living and learning within and preparing for seem, for the West at least, darker, more radically uncertain than a decade ago. At the same time, a change of government has flipped the educational agenda away from a language of 21st century competencies, towards a conservative framing of education as the acquisition of core subject knowledge. When we envisage educational futures, then, the key lesson is that we have to think about more than technological change – political, environmental, social, cultural factors will shape the worlds students are entering and the conditions of education.

This does not mean that technological change should be ignored in seeking to envisage the sorts of educational futures for which buildings might be designed. Simply that the technologies need to be recognised as being developed within and being embedded as part of the existing social and cultural contexts of schooling. If those cultures are competitive, individualised, exploitative – the technologies will be harnessed to those agendas. In and of themselves technologies will neither liberate nor transform education. Technology cannot and will not save us. At the same time, technologies will play into and interact with a wide range of other trends – from global terror to aging populations.

Technologies, therefore, cannot and must not be considered in isolation nor can they be allowed to dominate the educational imagination about the future. For every specialist in educational technology, the educational imagination needs to be complemented by a specialist in demographics, in cultural and social change, in environmental planning – and potentially the artists and writers who can help us to imagine that technologies such as the internet can be used both for the grooming of children to join international jihad and for children to skype grandparents across the country.

2. Working with futures in education requires attention to the weight of history

The second lesson from the BSF programme is that a set of educational futures that are dominated by techno-utopias will singularly fail to develop educational policy capable of addressing deep, structural social issues that will push against these visions. Robust educational futures work, as Ivana Milojevic argues, needs to pay attention not only to the pull of the future and the possibilities of the present, but to the weight of history, to those forces and practices that create path dependencies and work to resist change (Milojevic, 2012).

What this means, for example, is that on the negative side, fundamental issues of economic and social inequality will not be transformed by an integrated School Information Management system. It may offer more ways of measuring and counting the differences between children, it will not offer new solutions to addressing the poverty and hardship that fundamentally underpin some of these differences.

At the same time, ideas of the future can help to obscure what is valued and treasured in existing educational relationships. One reason that schools still remain, that teachers work with children, and that subjects exist, is not simply 'tradition', but the fact that there is love and passion and commitment to these places where people come together, to these practices and forms of knowledge that people have spent years working to develop. There are relations and ways of being that are treasured not simply out of inertia or nostalgia, but because they exemplify and protect particular, valued, ways of being.

In developing the educational imagination, therefore, as much attention needs to be paid to the weight of history – both what we are up against and what people will love and want to preserve - as to the new horizons that might be opening up.

3. Education does have a relation to the future – this needs to be understood and articulated.

The third lesson from the BSF programme is that any educational futures work needs a theory of the relationship between education and the future. Without it, the educational imagination will be restricted either to impoverished techno-utopias that can easily be captured within lazy and often ideologically motivated accounts of possible futures. It is to this question of the relationship between education and the future that I turn next to explore in more detail.

Education & the Future

The future, and how to prepare for it, is a perennial concern of education. Indeed, as I describe elsewhere, (Facer 2011, Facer, 2012) educational discourse has an implicit future orientation. Politicians call for education to prepare young people for a future knowledge economy and warn that 'nations that out-educate us today will out-compete us tomorrow' (Barack Obama). Academic publications call for alternative approaches to education in the light of impending environmental challenges or opportunities offered by new science. In the classroom, teachers ask young people what they want to be when they grow up, claiming that learning something now will help achieve something else in future. For better or worse, this discourse reflects the idea that young people are what the theorist of childhood Nick Lee calls 'fragments of the future'. Schools are therefore seen as sites through which futures can be shaped or at least defended against. Futurity is embedded at the heart of the educational process. And our desires and fears for that future are latent in our increasingly urgent search for educational alternatives.

How, then, might we think carefully about this question of 'the future' in education; about the desires that we project onto the educational project and onto young people about what we might want to become as societies, as humans, as a global civilisation and ecosystem? And what sorts of educational possibilities might be raised by placing the problem of the future at the centre of the educational imagination.

In making this suggestion that we take the future seriously in education, while at the same time arguing that futurity is already implicit in much educational discourse, I evidently run the risk of seeming to contradict myself. But we need to distinguish between the tacit, fantastical and often colonising invocations of the future that can characterise contemporary educational usage, and intentional and reflective attempts to open up the possibilities of working with the future on a more robust basis for the educational imagination.

To clear the ground for thinking about more democratic alternatives, it is worth first delineating three tendencies of the dominant future-orientation in education: the first is the tendency to treat the future as a landscape for rational choice making about which optimal choices can be made. Here, the future is conceptualised as a knowable landscape against which decisions can be assessed and preferable routes identified. The educational landscape here is populated by what Margaret Archer (2012) calls 'autonomous reflexives', the cost-benefit analysing individuals able to make a judgement with good knowledge about the world as it is unfolding. Clearly, there are significant problems with this orientation in education. Not least the fact that there is the risk of marching students ever onwards towards one particular assumed future that seems like the best bet at the time, only to discover, too late, that the landscape of the future changes after all. Such an orientation reduces the redundancy built into the system for both individual and for society, and offers no abundance from which to choose when other futures manifest themselves.

The second orientation is one that seeks to colonise the future by claiming it for particular values, practices and ways of being. This colonial orientation seeks to persuade young people of a particular narrative of the future and recruit them to fulfilling or resisting it – whether a future of environmental chaos or endless growth. This orientation has a long tradition in education from both progressive and conservative positions. But it raises a fundamental ethical question. Should education be concerned with presenting ideas of inevitable or desirable futures (in whatever form) to young people at all. As Noel Gough argues *'adults should be cautious – and confident of their moral grounds – before setting out to design curricula which, deliberately or otherwise, tamper with children's concepts and images of futures, regardless of whether or not these concepts and images reflect, distort, confound or transcend those of adults'* (Gough, 1990: 308)

At the very least, we may need to examine the conflicts of interest that necessarily ensue when projecting our present anxieties onto children's future lives. This is particularly important when such a projection enables adults to more easily abdicate responsibility for addressing such anxieties themselves in the present. The current pressing issues of responsibility for decarbonisation and for producing intergenerational economic justice are just two examples of such a projection.

The third orientation to the future in education is the conceptualisation of education as a distinctive means of protection against unknown and hence frightening futures. This orientation is captured in HG Wells' famous aphorism that 'civilisation is a race between education and catastrophe'. This is the powerful fantasy that education alone will rescue us from impending disaster. Where Wells was concerned with education as the means to vanquish fascism, today the same fantasy operates in relation to economic change, globalisation, aging populations and climate change. Education is to be the means by which all ills will be solved. Knowledge can overcome power, can tame brute reality.

Such a fantasy significantly over-states the capacity of educational experience and knowledge alone to produce security and wellbeing over the long term, while obscuring

other factors – access to material wealth, to productive capacity or to military and judicial power – that are equally important foundations for such security and wellbeing today. Ask the protestors in Hong Kong and Turkey whether knowledge alone is enough to secure democracy in conditions of near dictatorship. Ask the nearly 38% of young graduates in the UK working in non-graduate level and precarious employment, whether a degree can guarantee economic security.

The risk of the unexamined adherence to this fantasy, moreover, is not just that it is wishful thinking, but that by fetishizing educational success as a means of achieving personal and social goods, it deracinates education from the divergent, conflicting forces that also contribute to creating meaningful foundations for the growth of a good society: family and home, functioning democracies, communities, economies, technological resources and ecosystems. Such a fantasy of the unique role of education as talisman against the future may, as Jean Anyon (2005/2009) observes, militate against schools taking their place at the heart of and working alongside communities and families to actually create the better futures that are desired.

Together, these three positions treat the future as something that *can* be known, something that *should* be brought into being, and as something *against which we need to defend ourselves*. These are intentionally exaggerated and caricatured to make my point here. Nonetheless, my position is that, as a basis for imagining and creating alternative education futures we have to think our way out of these tendencies and open up new orientations to the future that treat it as a site of radical possibility.

We need a theory of education's relationship to the future that resists easy narratives of inevitable future trajectories, that resists the desire to colonise the future by colonising children's imagination of what will come to pass, and that recognises that the good society and the good life will not be built through education alone but are fundamentally interconnected with all other aspects of social change.

What would this have meant for a programme like BSF? First, it would have meant a principled resistance to the idea of there being a single knowable future for which schools could be designed – the fantasy of the globally 'flat' knowledge economy. Second, it would have meant that schools were not considered as prefigurative spaces for the creation of better futures predetermined by adults, but as laboratories and experimental spaces for children to explore the possibility of radical novelty. Finally, it would have started from the premise that children's life chances cannot be dependent upon schooling alone, but as being fundamentally interconnected with the long-term strength and resources of the wider community. A properly transformative educational imagination, in that case, would have to deal with both the schools and the communities in which they are located.

Schools as laboratories for playing with the future

I want to conclude by reflecting on what these positions mean in terms of curriculum and therefore what they might mean for the design of school buildings. If we return to the idea of schools not as spaces of preparation for knowable futures, but as laboratories for bringing into being new possibilities and new futures, then we need to operate with a different set of metaphors for educational practice. Rather than thinking of a curriculum for the future, we need to imagine a 'pedagogy of the present' which treats the educational moment as a distinctive temporality between past and future, like an 'ecotone' – a biological term for a liminal space, a boundary between different states – such as an estuary, in which new beings come into existence (Facer, 2016)

Here, rather than an education that ‘prepares for the future’, then, the challenge is to conceive of an education that works on, makes, shapes and rethinks futures that can be brought into being. Here I would propose that an education that set out to achieve these aims should work to make visible the five different orientations to the future that cut across the disciplines and subject areas that we currently take for granted. These are:

First, the **modelling** orientation. Here schools would encourage students to notice all the subjects and practices that allow them to conceive models of the future. This might be mathematical modelling or science fiction or forum theatre. The common feature of these practices is their capacity to support the imagination to play with variables, to examine and engender unintended consequences from their interactions, to explore how different scenarios might come into being. Here we might cluster elements of the arts, mathematics, sciences.

Second, the **stewardship** element. Here children would be encouraged to explore how different subjects actively facilitate care for and preservation of diversity. How such subjects allow societies and individuals to keep in play the huge range of ideas, languages, ways of knowing and being, that characterise the richness of human and material existence. Critically, working on the future through stewardship is about keeping the breadth and diversity of resources for human knowledge open as resources for the wide range of potential futures that might emerge. Here we might cluster the humanities but also those elements of the sciences that encourage the real close attention to the diversity of life.

Third, schools would work to promote **reflexivity** across the curriculum. Here schools would be building students’ capacity to analyse, unpick and challenge narratives of the future promoted by others. Here might be included the linguistic and rhetorical skills to decode ideological accounts of the future as well as the technical skills to interrogate the models and ideas of the future that they and others are creating. Here we might include everything from linguistics, to social sciences to statistics.

Fourth, **disciplinarity**. Disciplines came into being in the 18th century precisely to deal with the problem of new information, to help make sense at a time of radical increase of information and knowledge, of the ever-proliferating new ideas that were being presented (Wellmon, 2015). Disciplines, therefore, can be understood not as inert bodies of knowledge, but as distinct traditions that offer a set of future-oriented rules for judging how and on what basis new information should be judged and accepted (Stenhouse, 1975). Here schools would draw students’ attention to the different rules, expectations, assumptions and ideas inherent in different disciplinary traditions, to the ways in which knowledge is validated and judged in each discipline and to the ways they help to make sense of new information.

Finally, **experimentation**. Here schools would be creating conditions in which students can actively seek to invent and make their own futures. This might range from the design of prototypes to the development of social innovations to the creation of political projects. Here we might include subjects from design and engineering, to computing, to social sciences.

These five practices – modelling, stewardship, reflexivity, disciplinarity and experimentation – would constitute more robust foundations for an educational imagination that seeks to take the future seriously. Underpinning all of them is a realisation that the relationship between past, present and the future is non-linear. Rather, that ideas of the future act on the present and reshape our understanding of history just as the past has resonances far

into the future. Together, there is a conception of the school as precisely a distinctive temporality that exceeds the reductive linear narratives of politicians and futurologists, and instead recognises the educational space as having its own logic and relationship to time: a generative one.

Such a framing of education's relationship to the future might manifest itself in radically reconfigured spaces – a new clustering of subjects around these five practices, for example, and the creation of dedicated space, probably distributed within communities, that is oriented toward experimentation in the world. As I have suggested elsewhere (Facer, 2011) it may be that the school museum, farm or zoo makes a return in a school committed to working with the past as a route towards stewarding the future. Zoos, farms and museums offer, after all, real opportunities for students to work with and understand the abundance and diversity of the natural and cultural worlds (Farm to School n.d; Williams & McCarthy, 1985; d'Aquisto, 2005). Alternatively, such a reframing might more plausibly be achieved through curricular rather than physical and material redesign and through changes to the temporal order of schooling rather than the spatial order. It might manifest itself in projects and partnerships connecting different subjects, in collaborations and cross-curricular activity, in the creation of project-based work. As I mentioned earlier, after all, subjects are part of the weight of history that we are working with in education – they frame the ways in which we recruit and train teachers, and they are at the heart of the mythology of what education is. Both love and inertia are likely to see subjects remain central to school design even if schools reconfigure themselves as laboratories for the future. What might manifest itself more clearly in this reframing of education's relation to the future are the points of connection across subjects and between schools and the world outside their walls. Such points of connection, in turn, open up the possibility of changing socio-spatial practices to enable and enhance conversation, connection and collaboration.

Conclusion

It is impossible to avoid ideas of the future in the design of school buildings. They saturate assumptions about what children need to learn and about the role that buildings will come to play. Too often, however, these ideas of the future fail to recognise that education itself has a distinctive temporality. That education is a place that generates futures rather than simply working towards them, that education is a time that puts past and future into dialogue rather than simply handing down past knowledge to a future generation (Masschelein, 2011, Osberg, 2010). This perspective encourages an educational imagination that moves beyond the anxious search for foresight in order to make a frenzied best guess about what sorts of facilities and resources will be important. Instead, it encourages a genuine confidence in the purpose and role of schooling that will sustain beyond the fads of government initiatives. Namely, the school as a laboratory for imagining and creating social futures. This is necessarily an expansive role, it implies an openness to abundance and to change. Should such an educational imagination govern the design of school buildings, it would lead to an open, generative restlessness, to porous boundaries, to the refiguring of the social as the site of schooling and the institution as a site of reflection.

References

Anderson, B., (forthcoming) Preemption, precaution, preparedness: anticipatory action and future geographies. *Progress in Human Geography*.

- Anyon, J., (2005) *Radical Possibilities: Public Policy, Urban Education and a New Social Movement*. New York and London: Routledge.
- Anyon, J. (2009) 'What is to be Done? Toward a Rationale for Social Movement Building', in H. Svi Shapiro (ed.) *Education and Hope in Troubled Times: Visions of Change for Our Children's World*. London and New York: Routledge, pp. 47–62.
- Besten, O et al (2011) Claiming events of school (re)design: materialising the promise of Building Schools for the Future , *Social & Cultural Geography*, 12:01, 9-26,
- Burke, C., Grosvenor, I., (2008) *School*. London: Reaktion.^[1]_{SEP}
- d'Aquisto, L (2005) *Learning on Display: Student Created Museums That Build Understanding*, Association for Supervision and Curriculum Development
- Facer, K (2011) *Learning Futures: Education, Technology and Social Change*, London:Routledge
- Facer, K (2013) The problem of the future and the possibilities of the present in educational research, *International Journal of Educational Research*
- Facer, K (2012) Personal, relational and beautiful: education, technologies and John Macmurray's philosophy, *Oxford Review of Education*, 38:6, 709-725
- Facer, K (2016) Using the Future in Education: Creating Space for Openness, Hope and Novelty, in Lees, H and Noddings, N (eds) *Handbook of Alternative Education*, Macmillan
- Farm to School Network (no date) *The Benefits of Farm to School*, <http://www.farmtoschool.org/Resources/BenefitsFactSheet.pdf>
- Futurelab (2005) *What If... reimagining learning spaces'* Bristol: Futurelab
- Gough, N (1990). *Futures in Australian education: Tacit, token and taken-for-granted*. *Futures*, April: 298–310.^[1]_{SEP}
- Kent/BSF (2004) 'Building Schools for the Future', White Paper
- Kraftl, P (2012) Utopian promise or burdensome responsibility? A critical analysis of the UK government's Building schools for the Future Policy *Antipode* Vol. 44 No. 3 2012
- Lewis, T (2006) Utopia and education in critical theory. *Policy Futures in Education* 4:6–17.
- Livingstone, S and Sefton-Green, J (2016) *The Class: Living and Learning in the Digital Age*, New York: Macarthur Foundation
- Lupton, D and Williamson, B (2017) *The datafied child: The dataveillance of children and implications for their rights*, *New Media and Society*
- Masschelein, J and Simons, M (2011) 'Experimentum scholae: the world once more ... but not (yet) finished!' *Studies in Philosophy of Education*, 30: 529–535.

- Milojevic, I (2005). Educational futures: Dominant and contesting visions. London & New York: Routledge.
- Osberg, D. (2010) 'Taking care of the Future? The complex responsibility of education and politics' in D. Osberg and G. Biesta (eds) Complexity Theory and the Politics of Education, Sense Publishers.
- Quay, R (2010) Anticipatory Governance, *Journal of the American Planning Association*, 76:4, 496-511,
- Stenhouse, L (1975) *An Introduction to Curriculum Research and Development*, London: Heinemann
- Ultralab (2004) *Building Learning Futures*, Norwich: University of East Anglia
- Webster, F (1995) *Theories of the Information Society*, London: Routledge
- Wellmon, C (2015) *Organizing Enlightenment: Information Overload and the Invention of the Modern Research University*, Washington: Johns Hopkins University Press
- Williams, D and McCarthy, D (1985) Student Benefits from School Farm Activities, *Journal of the American Association of Teacher Educators in Agriculture*, v26 n2 p16-23