EDUCATING THE CITY: Urban schools as social infrastructure

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Funded through UCL Innovation and Enterprise Knowledge Exchange.

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About this project

The development of this discussion paper was funded through a UCL Knowledge Exchange grant, bringing together researchers from the Bartlett Real Estate Institute (BREI) and Institute of Education (IOE) with design practitioners from Architecture Initiative (AI). We have consulted with a wide range of professionals across the field of school building research, policy, procurement, design and delivery. The central aim has been to better understand the constraints and opportunities for urban, mixed-use schools, and the capacity for these to offer greater social and community value; that is, to become vital components in local social infrastructures. This challenge is an ongoing one but has particular resonance after a period of austerity during which many publicly funded facilities have been lost, followed by the 2020 disruptions of a pandemic.

While there are many voices of support for schools to be connected to their communities (and with different initiatives across the boroughs, cities and countries that make up the UK), this is often linked only to the occasional (and often conditional) community use of playing fields, sports halls and performance halls. Joint-use and an integrated approach to the delivery of schools alongside other complementary social infrastructure sites still remains difficult to achieve.

Urban school typologies have been evolving for some time, not just in the UK, but globally as a result of increasing pressure on funding and escalating land and property prices. Mixed-use and high-rise schools are increasingly common, maximising the potential for other higher value developments (often housing) to be built, the sale of which can offset the high land value for the school. This does not, however, seem to have led to innovations in cross-funding of social infrastructure.

The focus of this discussion paper is urban schools in England where due to the complexities of land cost and availability, there are frequent opportunities for creative approaches to the delivery of buildings and facilities; though the overarching vision for integrated schools is more widely applicable.

While there are numerous methods for the delivery of schools across the UK; local and centralised, private and public, and more recently developer-led through centralised funding, it is not the intention of this report to advocate an approach towards one or the other. Rather, the principles we outline are concerned with enabling the leveraging of schools as part of the network of social infrastructure across cities, and the potential

opportunities and challenges for blended asset provision. Similarly, this paper is not aimed at pedagogical debate, but references more broadly the researched benefits of community integration of schools.

Earlier this year, UNESCO published a report, *Education in a Post-COVID World: Nine ideas for public action* which, among other things, calls for the strengthening of education as a common good, and the protection of the social spaces provided by schools. The report stresses the importance of education as critical not just to those in school, but also the central role of adult education and lifelong learning as our communities come together to re-shape our social, economic and political life. We hope our work here offers some practical steps towards how this support might happen.

In the UK, the recent and ongoing impact of the 2020 pandemic has brought renewed focus to our schools and the important function they have, not only in providing education to those of school age, but also as providers of family support, social welfare, mental health, well-being support, and disseminators of information (i.e. public health). As we move forward it is likely our lives will remain more local than they were before the pandemic, and the provision or lack of provision, of social infrastructure in communities will make very significant differences to the quality of people's lives.

1- International Commission on the Futures of Education (2020) Education in a post-COVID world: nine ideas for public action UNESCO https://unesdoc.unesco. org/ark:/48223/pf0000373717/ PDF/373717eng.pdf.multi

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February 2021

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Introduction

Urban schools as social infrastructure

English² schools need urgent investment if they are going to keep pace with societal and physical changes in our cities and towns, and remain relevant to their pupils, staff and the wider community. In June 2020, a ten-year refurbishment and building programme was announced by the UK government, both to improve learning environments, and to support post-pandemic recovery³. In this context it is vital that we don't miss opportunities for schools to better integrate with, and enhance, their localities.

There is also a specific challenge for urban schools. This is because new school building typologies are emerging as a result of increasing pressure on funding and escalating land and property prices. The result is a tendency towards more complex, dense, mixed-use solutions. But as schools' developers and providers struggle to make the sums add up within existing funding rules, is the potential for schools as inclusive learning and community places in cities and towns being forgotten?

The norm remains the single-use school, isolated and gated on its own site and, as a consequence, current policy and advice are still geared towards this traditional building typology. Emerging urban schools are therefore happening 'on the run' as funding needs dictate (with little associated research or evaluation) and without the guidance that can enable developers, schools, academies, local authorities and policymakers to better leverage their assets and achieve social as well as commercial ends. Whilst many schools rely on community-use lettings to balance their books, the spaces provided are often not designed with this in mind, nor are schools sufficiently enabled to engage more broadly with their localities. With budgets on a 3-year cycle in England,

schools do what they can through ongoing adaptation to changing circumstances, but within the constraints of a disconnected approach, there are limits to both vision and outcomes. Lessons are not being learnt from past examples of best practice and important opportunities are being missed to create new kinds of joint-use schools within mixed-use developments that enhance neighbourhoods and provide high quality educational offerings not just for children but the wider community.

In much of the research literature and in general debate, 'urban schools' implies the 'inner-city' and (assumed) disadvantaged settings. However, we use the term in a specifically spatial sense to define schools located in an urban area – city schools and those in densely populated suburban settings. These schools arguably have the greatest capacity to benefit from, and provide wide-reaching access to, educational resources. In addition, we also use the concept of 'community' in its most straightforward definition as a group of people living together in the same place, recognising that this is often a disparate group with different and even conflicting attitudes and life situations.

In discussion with key experts and stakeholders across the sector, there was general agreement that baseline schools provision in England is at a low point. As the social infrastructure – the everyday facilities, spaces and activities that people can enjoy⁴ usually for free – declines across our cities, now is the time for schools to reclaim their position as a central service for their localities. Beyond simply educating their own pupils, schools can be seen and delivered as civic hubs. We want to challenge current policies and policymakers; provoke new ways of thinking about

schools, communities and social infrastructure; create space and opportunities for informed debate and new ideas; and present a framework for unlocking the value of schools as social infrastructure.

Why is this important? Firstly, it is inefficient and ineffective to treat school buildings in isolation; existing policy, procurement, development, design and management systems need to be orchestrated towards a better and integrated use of resources. Secondly, we need to explore how schools can be managed differently to enable them to be interlinked through organisational and social networks that can support community needs more holistically.

There is an historic and continuing problem with the pace of change in government policy and strategy which limits the potential to respond to the contemporary challenges for educational establishments in our cities. A long-term strategy fit for the future is not apparent, and there is concern that the UK will miss an opportunity for another generation as a result of a lack of investigation and willingness to embrace more flexible thinking.

In this discussion paper, we seek to highlight the challenges with current mechanisms for providing and managing school buildings that limit their capacity to be networked with other sites of social infrastructure.

And we look to provide insights into opportunities for a broader vision of what educational facilities could be.

Our overall aim is to offer many ways to re-think schools in the community, whilst recognising and valuing the various agendas and perspectives across the many stakeholders involved and taking notice of diverse types of education and community needs. What is clear is that there is no one-size-fits-all model for education. But the 5-point framework outlined in *Educating the City: Urban Schools as Social Infrastructure* does require political and social as well as financial investment from all sides and

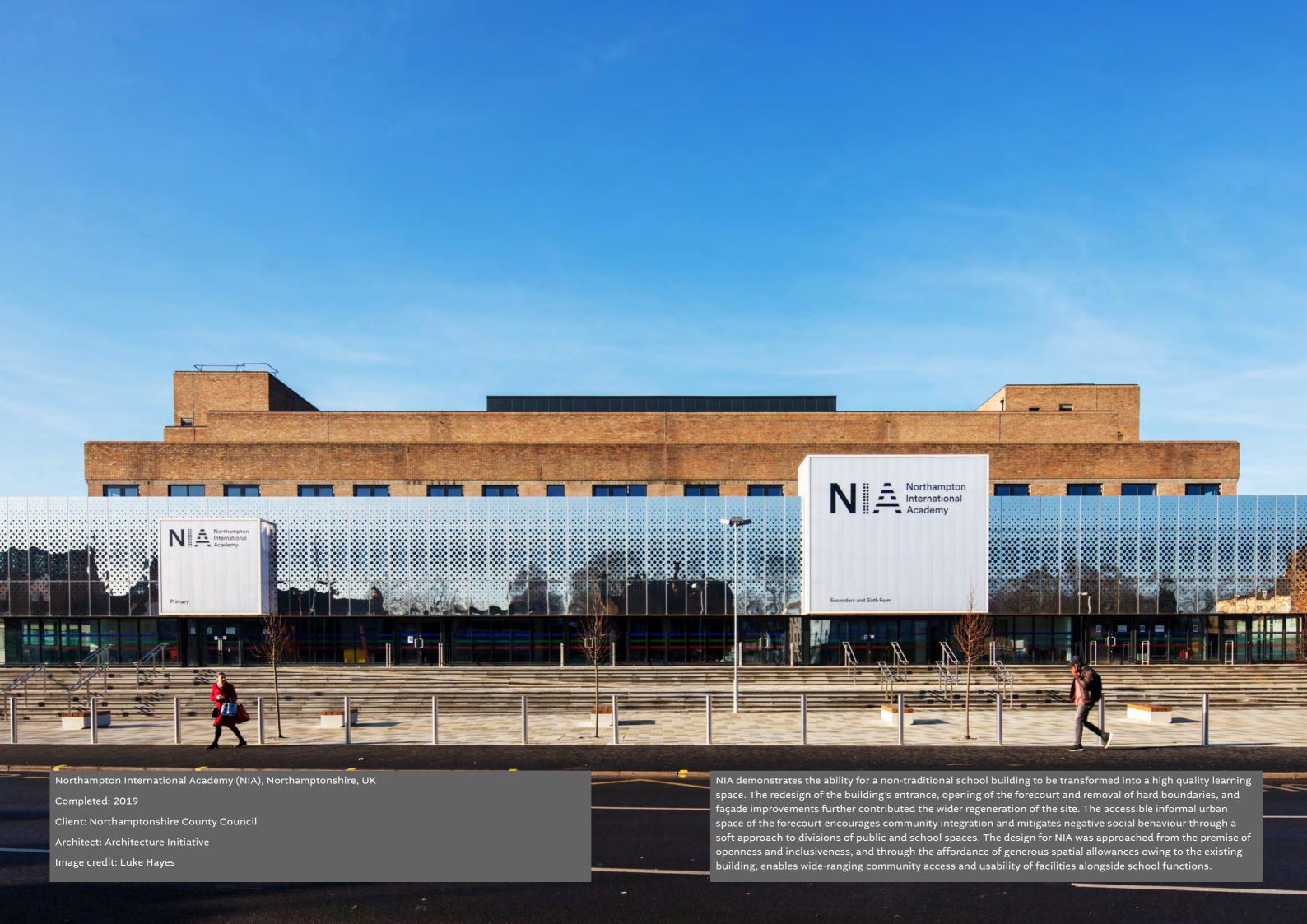
at all levels; government, policymakers, local authorities, academy trusts, school principals, developers, designers, academic researchers and locals as well as school communities.

This work is relevant to anyone who is involved with, or interested in, the future of schools in our urban cities and communities. We know that developers, educational organisations and the agencies that support them often do not have the time required to research the wider picture, to reflect on developing patterns and building typologies, or to work together towards influencing policy and practice beyond the immediate concerns of specific projects. By bringing together key stakeholders across the sector to take time to discuss challenges and opportunities we hope to both produce evidence-based resources that are valuable to diverse stakeholders, and to open up spaces for informed debate and change.

²⁻ We focus on England in this report, as Scotland is investing to some extent, as is Wales. In Northern Ireland, legislation (Article 140 of the Education (NI) Order 1989) already enables schools to make their facilities available for use by members of the community served by the school.

^{3- &#}x27;PM announces transformative school rebuilding programme' Press Release 29 June 2020 https://www.gov.uk/government/news/pm-announces-transformative-school-rebuilding-programme

⁴⁻ A definition drawn from p.28, Calafati, Luca, Jill Ebrey, Julie Froud, Colin Haslam, Sukhdev Johal, and Karel Williams. (2019) 'How an Ordinary Place Works: Understanding Morriston'. Foundational Economy - Research Report, May, p28 https://foundationaleconomycom.files.wordpress.com/2019/05/morriston-report-v6-13-may-2019.pdf



A 5-point framework for unlocking the potential of schools in urban communities

1 Broadening How We Value Schools

Schools can have a very positive impact on our personal and collective well-being both directly and through the many local services and facilities they can offer: provide life-long learning opportunities; act as communicators of information and knowledge to the community at large; be a catalyst for urban regeneration; promote social cohesion and stability; and be uniquely responsive and relevant to their immediate publics. All these aspects of community value need to be included in policy, implementation and evaluation measures, and made a key consideration in planning application criteria.

2 Educational Planning and Facilities Are For The Long Term

In the current context, there is a lack of long-term vision about what school assets and buildings can offer beyond immediate policy and financing agendas. This short-termism results in an inability to take into account broader issues for schools and their communities or to connect sites of social infrastructure. Our schools continue to be delivered and designed through fragmented processes, where different actors don't have time, resources or motivation to build deeper connections nor formulate educational and investment objectives that include social value over time. Schools investment needs to be understood as long value capture, as part of the bigger picture, for not just the immediate cohort but for all ages in a locality, for this generation and the next.

3 Join Up The Thinking

Many working in the education sector struggle with the seeming imbalance and disconnect between different government departments in their various policies and practices around procurement, design quality, standards and requirements. Schools' guidelines at national and local levels are also fragmented and inconsistent. This is because current educational building procurement is predominantly framed as an operational and technical problem, an approach that ends up preventing richer stakeholder and public debate on school buildings, their multiple functions, the need for urban and local integration, and for the environmental and social sustainability of schools. In this context, it is vital to explore new strategies for enabling holistic approaches and to create evidence-led research and development that can underpin debate decision-making. This is to support both the initial procurement and design process and when schools are adapted.

4 Enable Schools To Deliver Community Support

Although all schools already work with their local communities, they often struggle to develop community connections beyond those 'given' through pupil cohorts, parents and carers. Operational and regulatory constraints can further hinder the management and community use of school facilities. School leaders usually have to organise ways to enhance community provision on a case-by-case basis, with little guidance about best practice to inform their actions.

Policies around, for example, safeguarding, maintenance costs, and revenue management are important. But we also need a sharing of knowledge about resource-effective and regulation-compliant ways to enable and increase community involvement.

5 Design In Community Potential From The Beginning

When schools are built to minimum space standards, multiple uses are already made more difficult. Without flexibility and long-term adaptability designed in, users have to work harder and more creatively to develop and sustain community connections. Further, the conventional gated school with limited usage during evenings, weekends and holidays reduces potential, whilst remaining a very poor use of expensive resources.

11 _|

We already have past and contemporary examples of schools designed for community integration to learn from. In addition, new types of schools, particularly in dense urban sites with high land and property prices, offer important opportunities for sharing facilities and making efficient use of resources. We should enable and evaluate these so as to share and build on innovative practices for better educating the city.

Broadening How We Value Schools

THE PROBLEM: relying on a narrow academic standards agenda

The potential for schools to extend beyond a limited educational remit is becoming an increasingly urgent question, particularly within emerging and existing urban centres.

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It is about changing the way you think, actually schools are civic places. Let's think about all of the different elements of social infrastructure that create a hub of "civicness". If you can actually start thinking about schools, hospitals and every other place of social infrastructure in a community, and start to integrate that, that actually brings a whole different way of thinking about the management of assets.

Kathy Jones, School Infrastructure NSW

The vast majority of schools are publicly funded assets, often with significant land and spatial requirements. It is vital that a much wider understanding of community value be included in policy, implementation and evaluation measures, and made a key consideration in planning application criteria. Whilst this can be called 'civic-ness', it is also about equality of opportunity and inclusion.

With this in mind, school comes to mean much more than just a building. As Deborah Ralls notes, "to unlock its community potential, [school] has to be a place in and through which social relations occur. Viewing a school in this way mirrors Massey's (1994) proposition that places should be conceptualised in terms of the social interactions, or processes, which they tie together."⁵ This, then, is a relational approach, where the educational facilities, their surroundings and the diversity of inhabitants all affect what is possible.

Schools' wider social missions have been progressively limited by an increasing focus on standards, employability and individualized understandings of educational purpose. Not in themselves absolute negatives, but when these changes have taken place during austerity, with libraries, swimming pools and adult learning centres closing, their combined effects can be very significant. Further, we have seen changes towards "the marketisation of education [and] a directive relationship between government and schools that potentially bypasses the participation of teachers in their own work and disengages schools from their local communities."6 Whilst this runs in parallel (and often in tension with) many other initiatives such as making schools more inclusive and sustainable7, it also makes it harder for schools to become part of a broader social infrastructure.

In parallel, how schools are commissioned in new developments often results in complex tensions between central government, local authorities and school operators dependent on a range of governance and funding frameworks. This can be a barrier to improved accessibility and thinking beyond the basic rental of school facilities for community use.

⁵⁻ Deborah Ralls (2019) 'Becoming cooperative – challenges and insights: repositioning school behaviour as a collective endeavour' *International Journal of inclusive Education* 23:11. Available at: https://www.tandfonline.com/doi/abs/10.1080/13603116.2019.1629159?scroll=top&needAccess=true&journal-Code=tied20

⁶⁻ Ainscow, Mel & Booth, Tony & Dyson, Alan. (2006). Inclusion and the standards agenda: Negotiating policy pressures in England. *International Journal of Inclusive Education*. 10. 295-308. p?
7- ibid.

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What can schools provide beyond the classroom?

1a. Community services and facilities

School buildings, their contents and grounds, often represent the largest single asset for their immediate locality. This includes sports halls, playgrounds, meeting rooms, a library and other facilities; and can offer access to services and equipment such as digital technologies and gym amenities. In addition, many schools already offer parenting support and forms of childcare, through breakfast and after-schools clubs. In some cases, related community facilities are built into the school making leisure, social, housing and health care more accessible and potentially more resource-efficient.

And longer-term, could community educational facilities be shared across a wider distributed network within a local area, to increase resource effectiveness through economies of scale? Why, for example, are we locating brand new school sports hall next door to existing community facilities with little consideration for shared-use which could enable the provision of enhanced facilities to both the school and local community?

However, despite many examples of these kinds of initiatives in the UK, the utilisation of school buildings can be less than 30% of their useful lives.⁸ This is neither economically, spatially or environmentally sensible. Yet the idea of community schools is not new⁹ and there is already research evidence about the value of these interconnections:

There is good international evidence that using school facilities to provide community-based services can have positive impacts on a range of outcomes for children, families and communities. Bringing services together on a single site can generate a cumulative 'community school effect', help address child poverty, and solve some of the challenges posed by declining budgets for community services.¹⁰

Integrating enhanced community facilities from the earliest design stage can increase the long term effectiveness of community-school relationships, as well as generate income for schools. For example, at Urban and Civic's secondary school in Rugby, the size of the sports hall was increased to Sport England standards to allow greater community use. Because the developer worked with the school operator from the outset, the long-term management of the process increased the likelihood of sustainable community integration.

Mixed-use school developments in urban settings can also offer opportunities to deliver housing solutions that can support key worker provision and improve recruitment and retention. "To achieve this often means not always chasing the highest price for land or apartments, but allowing re-investment in sustainable development" suggests Howard Smith, Senior Vice President at Keppel Capital. While there is a financial imperative to offset high site acquisition costs on urban sites, this needs to be balanced with requirements to provide more (and affordable) housing and community facilities; also recognising long term social value.

8- Wallbridge, B. (forthcoming), "How and why we should design and build schools today" in Wood, A. and Burke, C., Educational Aims and Values through Architecture.[self-published]

9- See for example, Cathy Burke and Dan Hill (2020) 'The Dispersed School' in Helen Taylor and Sharon Wright (eds) Urban Schools: *Designing for high density*, RIBA Publishing, as well as earlier examples, such as Colin Ward and Anthony Dyson (1973) 'Streetwork: The Exploding School' Routledge and Kegal Paul.

10- Alan Dyson and Kristin Kerr (2016) *Increasing the Use of School Facilities "Part A: UK and International Evidence"* Public Policy Institute for Wales pp 2 -13 http://ppiw.org.uk/files/2016/04/Increasing-the-Use-of-School-Facilities-Report.pdf

11- Hayball, GLEAM Webinar, Sharing is Caring: Towards Joint Use Developments, July 2020, https://youtu.be/CXzSBQUE1rY

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South Melbourne Primary School, Australia, Hayball Architects

Completed: 2018

Client: Department of Education and Training, Victoria

Architect: Hayball Architects

Image Credit: Chris Matterson Photography

South Melbourne Primary school is a mixed-use facility combining community spaces including an early learning centre for 44 children, maternal and child health consulting rooms, shared multipurpose spaces and community accessible sporting facilities. The community offer was instilled from the client group – the state government and the local government. The design of the building articulates this greater civic use through removal of boundary fencing, deliberately clear, open and inclusive access to the building, and through the adjacencies of publically accessible spaces within the building.



Houlton School, Rugby, UK

Completed: Due September 2021

Client: Urban & Civic (in partnership with Aviva Investors), Department for Education, Warwickshire County Council and the Transforming Lives Educational Trust.

Architect: Heyningen & Haward Architects

Image Credit: Urban & Civic

The project is centred around the transformation of the Grade II listed Rugby Radio Station into a secondary school with sixth form. This will be Rugby's newest school and has been accelerated to support Warwickshire County Council's need for additional secondary school places. Critical to the acceleration of this project has been the cross-department working of government which has seen significant investment in Houlton through Homes England, enabling Urban & Civic to bring forward a 5km link road to unlock the site for housing, and facilitates access to the school site. Further investment through the Department for Education is enabling the building of the school including both the restoration of the listed building, two new teaching blocks and a Sports England compliant hall – suitable for community access and sports.

¹⁵

1b. Life-long learning opportunities

Schools are an obvious site for increasing local opportunities for adult learning across all age ranges. This can be for health, leisure and recreation (such as swimming classes and fitness sessions) or be skills and knowledge orientated, for example around training programmes or academic courses. Again this already happens in some cases, but becomes more relevant as other adult learning services are being defunded in the UK. These kinds of services are vital. They can help overcome a local community's gaps in adults' basic skills, improve digital literacy and increase health and well-being: increasing both employment opportunities and overall neighbourhood resilience. In 2015, every EU country failed to achieve the target benchmark of 15% participation in adult education.12 Education policy makers at both national and local levels could and should be leveraging existing facilities and new build projects to better educate the whole population.

1c. A catalyst for urban regeneration

Good development is all about the early delivery of infrastructure - that's the standard things like roads, trees and drains, the very basic things: but also, importantly, the social fabric as well, so schools go in usually before any residents arrive.

Richard Coppell, Development Director, Urban and Civic

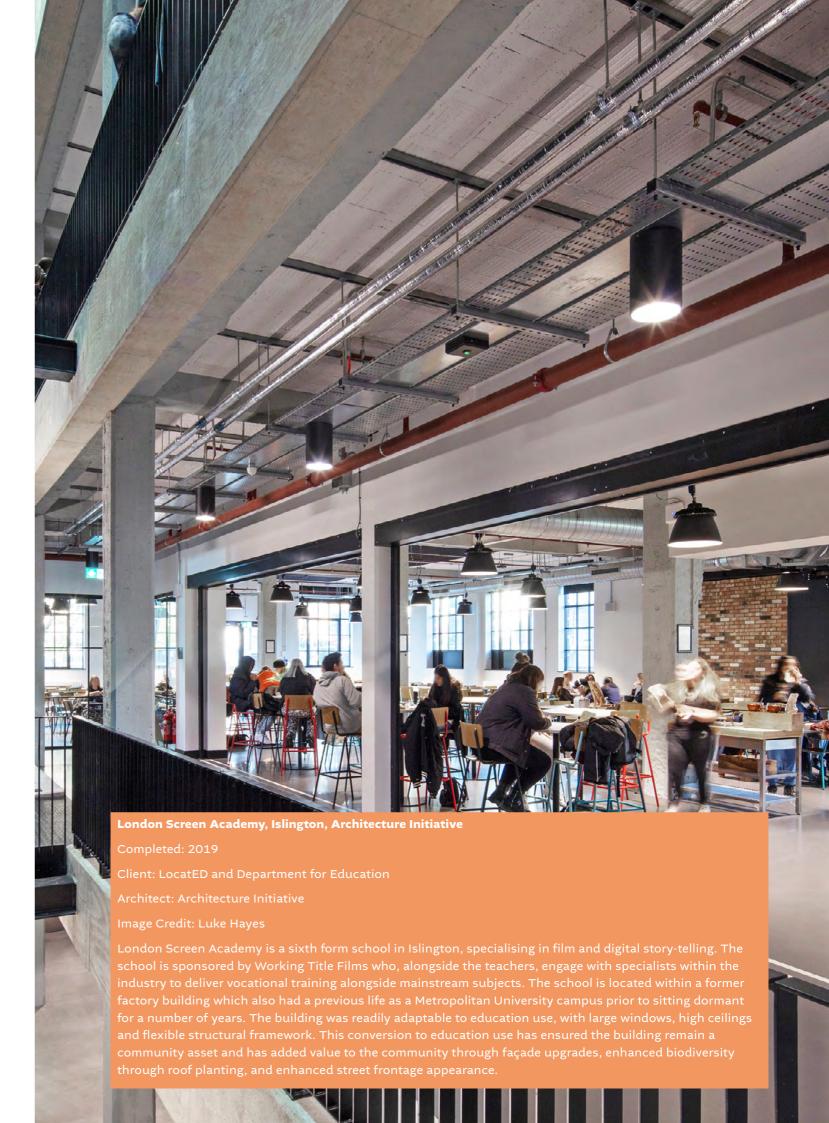
Schools and other learning facilities are central to the quality of life in a locality and are therefore a key component of local planning and development activities as well as examples of civic architecture - as symbols of pride and community, "designed to work hard as places of educational quality but also to impress themselves upon the surrounding context" (Richard Coppell). In this sense, educational facilities in our urban communities present opportunities

to make the public realm more attractive and welcoming through, for example, the replacement and repurposing of redundant buildings¹³, inward investment and increased footfall and social activity.

Of course, processes of urban regeneration tend to complex shifts in patterns of inequality, as land and house prices rise, and can 'price' poorer people out of an area. Since poverty is associated with both material (financial) and non-material (lived experience) outcomes, addressing it through place-based initiatives - including new school building and improvement - is most likely to benefit poorer households when part of a explicit neighbourhood renewal policy, rather than being entirely reliant on the market.¹⁴

In addition, where schools are integrated with local job markets across public and private sectors, there can be opportunities for partnerships that can support vocational study for those it would benefit and, in turn, enhance the range of local commercial and social activities. Opportunities such as forward-lease offices and workspace for associated / partnered organisations could further enable a mixed-use offer for new developments with complementary and shared use spaces to the benefit of both the school and business, also adding commercial value for the developer.

14- Crisp, Pearson and Gore (2015), for example, argue that local regeneration programmes have the potential to improve poorer people's lived experiences. In this context, schools can be a vital part in improving local social infrastructure. Crisp, Richard, Pearson, Sarah and Gore, Tony (2015). Rethinking the impact of regeneration on poverty: a (partial) defence of a 'failed' policy. *Journal of Poverty and Social Justice*, 23 (3), 167-187. https://shura.shu.ac.uk/11299/3/Crisp%20 Rethinking%20the%20impact%20of%20regeneration%20on%20poverty.pdf



¹²⁻Improving Policy and Provision for Adult Learning in Europe: Report of the Education and Training 2020 Working Group on Adult Learning 2014 -2015. Publications Office of the European Union, 2015, European Policy Cooperation (ET 2020 framework) https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework_en

¹³⁻ The refurbishment of existing buildings is further beneficial to wider environmental and cultural sustainability objectives, but is often hindered by a 20% VAT payable on refurbishment buildings, which often encourages demolition in favour of new build alternatives.

to this kind of education. However, he also noted the

importance of an increased range of paraprofessional

and volunteer roles to support community-based

employed (or provided space for) a community

school nurse, librarian, medical specialist, senior

citizen centre coordinator, police-school liaison

officer and adult education specialist. In addition,

he proposed the critical importance of a community

school director, community education coordinator,

or community education agent. Without a person

community relationships, many current initiatives

responsible for brokering and managing school-

requirements and noted that some schools already

An Exploration of the Merits of an Asset-Based Community Development (ABCD) Approach', Educational Review, 17 October 2018

16- Ralls, Deborah, (2017) "Understanding Engagement in a Co-Operative School Setting: an Exploration of School-Stakeholder Relationships." University of Manchester, p.56.

15- Kretzmann J., P., and McKnight, J. L (1993) A Path Toward Finding and

Mobilizing a Community's Assets" from Building Communities from the Inside Out

Institute for Policy Research: Evanston, IL pp1 -11. See also Forrester, Gillian, Ju-

dith Kurth, Penny Vincent, and Mike Oliver (2018) 'Schools as Community Assets:

17- One of the better known examples is given by John and Evelyn Dewey in 1915 - both the worked-out educational and philosophical motivations and the practical routines and resources vital for enabling a community school, these last deriving from their analysis of the Gary, Indiana schools. Introducing their discussion of the community school's organisational practices, they first argue "a community that demands something visible from its schools, that recognizes the part they play in the welfare of the whole just as it recognizes its police and fire departments, that uses the energies and interest of its youthful citizens, not simply controlling their time until they are prepared to be turned out as citizens such a community will have social schools, and whatever its resources, it will have schools that develop community spirit and interests." Dewey, John, and Evelyn Dewey (1915) Schools Of To-Morrow, London: J.M. Dent & Sons p.175.

18- Hiemstra, Roger (1997) 'The community school' in The Educative Community: Linking the Community, Education, and Family, Baldwinsville, New York: HiTree Press. Reproduced in the informal education archives: https://infed.org/mobi/ the-community-school/

1d. Locally responsive and relevant

Schools often function informally as a support system for parents', carers' and children's pastoral and social difficulties. Support is often individual and personalised but it can also be embedded in longerterm strategies and initiatives explicitly aimed at enabling communities to deal with challenges.

Coordinated, coherent and consistent engagement with parents, families and the wider community helps engender support for education and can potentially raise the learning aspirations of young people and their families whilst also addressing barriers to learning. Helping to build resilient communities through repeated and sustained interactions between parents, teachers and students also develops shared interests and provides wider support systems both on an ad hoc and a formal basis as with after school care or pick up / drop off facilities, for example.

This is a two-way process: community- education partnerships also improve education practitioners' understanding of the wider community which in turn can make teaching more relevant and personal, and help to integrate local history, knowledge and resources into the school's curriculum.

1e. Community centred — a two-way street

To be truly community-centred, schools require the informal and formal involvement of community members in their leadership, management and activities. This could extend to involving communities in school-planning and design processes as well as curriculum-planning and resourcing. Community organisations are already likely to know local issues and how these relate to individual schools potentially enabling more integrated thinking around and resources for improvement strategies.

Enabling people to fulfil their rights and responsibilities of determining community needs (and identifying community resources that can be used to address those needs), increases their independence and well-being. One method, Kretzmann and McKnight's15 asset-based approach, starts by looking for what is present in the whole school community (staff, students, parents and community), as opposed to what is absent or problematic: assets rather than deficits. "Acknowledging what professionals need to learn from stakeholders establishes a clear link between a relational and an asset-based approach to engagement."16

This suggests that a local basis for social infrastructure enables more integrated and effective delivery of services, where schools can broaden how they operate for the public good by collaborating with other organizations and agencies working toward similar goals. Crucially this needs to be fully inclusive so that community engagement with, and use of, schools involves the broadest possible cross section of community residents.

These ideas are not new - concepts of the community school, for example, have a long history¹⁷. In the 1970s, Roger Hiemstra proposed four conditions for the development of a successful community education programme that remain relevant today:

- 1. Provision of diverse educational services to meet the varied learning needs of community residents of all ages;
- 2. Development of inter-agency cooperation and [various] public-private partnerships to reduce duplication of efforts and improve effectiveness in the delivery of human services;
- 3. Involvement of citizens in participatory problem solving and democratic decision-making;
- 4. Encouragement of community improvement efforts that make the community more attractive to both current and prospective residents and businesses.18

In England, the post-war Cambridgeshire Village Colleges¹⁹ and the Hampshire Schools programme begun in the 1980s²⁰, offer just some examples from which to learn.

Hiemstra argued that the reorganisation of a conventional school into a community school program did not require massive staffing changes. Rather, people would be selected on their commitment



Impington Village School, Cambridgshire, UK

Completed: 1940

have failed.

Client: Cambridgeshire County Council

Architect: Walter Gropius and Edwin Maxwell Fry

Image credit: Impington Village College from W 2015-04-21, by sps1955, is licenced under CC by 2.0

The community school model of the twentieth century was based on the idea of broadening the resources provided by schools, making these resources more accessible to the community, and in doing so, strengthening the link between community and school, thus making better use of the school's assets (like playing fields and swimming pools), after school hours. This model also allowed for cross-subsidies to enhance these provisions where possible. Impington College was an early example of a community school and was later a key precedent for the community schools of the 1960s and 1970s.

1f. Supporting environmental sustainability

Pam Woolner has written about "the potential for the school in the city to be part of the solution to environmental, and perhaps social, injustice: efforts rooted in improving the school space begin to create a centre for sustainable living and an environmental resource for the wider community."21 She explores evidence about the negative impact on learning of poor environment quality (air and noise pollution and limited space both within the school and green spaces locally) but also focuses on how schools can themselves lead on environmental sustainability. This can happen through school planning that takes into account environmental costs of energy usage and travel; school buildings that themselves act as models of good practice, such as including a green 'living' roof, creating growing spaces and nature reserves on site; by embedding education for sustainable development (ESD) into children and adult learning; and by initiating and/or supporting community initiatives, such as providing space for local farmers' markets and for shared community meal preparation and eating.

At the most basic level, having made room for gardening or cooking or any other practical activity, a school will tend to try to use that space: as one head teacher [...] explained, "If you've got that infrastructure, you can use it and you want to use it don't you?" The influence of the physical school setting is more powerful than this suggests, however, if harnessed appropriately. Sometimes this draws on how finding space for an initiative conveys value and confers a certain position, which will be understood within the school but also in the wider community beyond. ²²

Dr Pamela Wooler, Senior Lecturer in Education, Newcastle University

1g. Supporting energy efficient neighbourhoods and mixed-use developments

Mixed-use developments are a crucial part of the strategy towards achieving more sustainable neighbourhoods. Mixed-use communities, which may integrate combinations of residential education, retail office and other uses, offer several advantages such as reducing car dependence combating sprawl and fragmentation of urban areas, promoting economic development and integration of complementary functions.23 Further environmental economies are thought possible for such developments through more holistic approaches to provision of energy for example, but there are significant complexities and viability challenges that make realising the full potential of such developments difficult to implement.24 This is further challenged when the development is comprised of a mix of public and private assets with no common funding or operational strategies post completion.

In June 2019, the UK Government legislated to a net-zero target for carbon emissions by 2050. Towards this end, mixed-use developments have a number of advantages through creating site-wide energy centres which operate more efficiently, and through co-locating building types and user types with complementary energy needs. Schools, for example, have high energy demands during the day, while residential developments typically have higher loads in the evening. Where shared energy centres are used, utilising renewable energy sources as well as technologies such as Heat Pumps (air/ground/water), can enable the energy centre to operate at its optimum efficiency. The difference in operation periods can lead to a reduction in plant size to serve a development, saving on space and capital expenditure.

Government policy and indeed local planners are generally in support of site-wide energy centres across mixed-use developments. But while both the policy and the technology supports this, operational logistics and methods of evaluation often prevent opportunity. The most significant challenge is



School Kitchen Garden, Tiverton - Two Moors Primary School

Image credit: Simon Lewis, is licensed under CC BY-SA 2.0

usually ownership; who owns the energy centre?
Who repairs the equipment? Who is responsible for faults? This is even more challenging for school and residential developments when there will be numerous residential owners and a paid management company to maintain the residential building, while schools have limited resources available at their end. Already constrained school funding does not allow for complex arrangements for facilities management, and so schools will rarely want to take on the burden of such shared supplies.

Another challenge is the way in which energy is evaluated at the planning stage for mixed-use developments. Currently, different methods of assessment are used across school and residential or commercial buildings, rather than cumulative assessment across the whole site. This is particularly problematic in the context of deeply integrated school buildings; for example, with residential build directly above. Locating solar panels to serve the school's energy requirements becomes a clear challenge when

19- For more on the Village Colleges see Saint, Andrew. (1987) Towards a Social Architecture: the role of school building in post-war England, Yale University Press 20- Hampshire County Council Architecture (now Hampshire County Architects) is the in-house multi-disciplinary architecture and design department of HCC Property Services. UK. It has a long-term reputation for good school design and is the only sizeable public sector county architecture studio remaining in England. 21- Woolner, Pam (2016) 'The school in the city.' In S. Davoudi and D. Bell eds.

Justice and Fairness in the City. Bristol: Policy Press

the school don't own roof space. In these cases, a site wide energy assessment, combined with a shared energy centre would be a far more practical solution, than managing complex lease and access agreements to allow the school access to some roof space.

To enable a move towards more integrated energy assessment in mixed-use developments will require a significant shift in policy and thinking about energy measures, as well as operations and maintenance.

Third party management companies are a costly solution, and it is unlikely that schools would be willing (or funded) to take on this burden, and residential developers usually do not have the motivation to do so without long-term investment. A solution will require a more coordinated approach to energy provision across a local authority area, rather than a continued practice of site-by-site solutions that ultimately rely on the will and motivation of the end user.

²²⁻ Open Futures Evaluation 2011 - 2013 Report to the Trustees https://www.openfutures.com/

²³⁻ Hachem Caroline. (2015) Design of a base case mixed-use community and its energy performance. Procedia Volume 78:663-668

²⁴⁻ There remains limited evaluation data available to assess the energy demands and operations of mixed-use developments, often due to complex ownership arrangements and lack of site-wide post occupancy studies. Requirements for such studies are essential to building up a more complete picture of the energy efficiencies and inefficiencies in our built environment. Rabianski, J., Gibler, K., et al., (2009) Mixed-Use Development: A Call for Research. *Journal of Real Estate Literature* 17(2): 205-230.

2

Educational Planning and Facilities are for the Long Term

THE PROBLEM: a lack of visioning for the future

In the current context, there is a lack of long-term vision about what school facilities can offer beyond immediate policy and financing agendas. Our schools are delivered and designed through individualised and fragmented processes, where different actors don't have time, resources or motivation to build deeper relationships and perspectives, or to formulate educational and investment objectives based on the value that can be created with longer timescales. This short-termism results in an inability to take into account broader issues for schools in their communities or to consider connecting other sites of social infrastructure together.

A five-year political cycle is an obvious inhibitor to long term strategic planning. Differing agendas and philosophies result in education strategy regularly changing to align with political power. More time is spent concentrating on the mechanisms of change than actually making any progress. More cross-party debate and consensus is required to allow for longer term effective strategy to be put in place and maintained

Matt Godwin, Managing Director, Architecture Initiative

This has been exacerbated by a number of initiatives, often driven by eye-catching policies and financial mechanisms such as Building Schools for the Future (BSF) and the Private Finance Initiative (PFI); but which have then been cut back dramatically as policy has changed. Whilst many innovative schools have been created, and a variety of future scenarios predicted, there has been little to see of evidence-based long-term schools planning.

Investment understood as long value capture can have huge benefits both for the school and its wider locality.

If education spaces are seen as part of a bigger picture, aimed not just at an immediate cohort of children but at all ages in a locality, and for not just this generation but for future generations, we need to rethink how educational provision is funded, procured, designed and managed, in ways that more effectively bridge gaps in culture and power.

2a. Develop evidence-based long-term priorities

The National Pupil Projections for England²⁵ shows that the overall school population is expected to increase until 2024. However, this overall picture includes important differences between age groups (and so school types). For example, over the next few years, the secondary level population continues to rise rapidly (flattening in 2027) while demand for primary school places is beginning to decrease. It is likely too early to tell, but these figures could be greatly altered by the Covid-19 pandemic, and could especially impact on urban areas if households who can decide to, move to lower density settings. As the RIBA noted in 2016 when student growth was still in primary schools, these changing patterns have not been matched by school building:

In London the crisis is already acute, and across England rising populations have not been accompanied by new school places.

Manchester, Leeds, Bristol, Cambridgeshire, Derby and Hampshire are already seeing serious problems and experts are warning that without urgent action, over the next five to ten years, as the surge in primary school pupils moves through the system, this problem will worsen and spread dramatically.²⁶

In this context, The National Policy Planning Framework's (2019:27-8) explicit focus on widening the choice of school places fails to address deeper underlying problems. A policy-driven emphasis on choice - precisely when school availability is at its lowest and given that choice itself requires surplus in order for options to be genuinely available and exercisable – avoids the importance of good long-term planning or decisions about quality; that is, about what can makes better schools. It also distracts from the major challenges facing schools and can create long-term harms, educationally and environmentally since choice increases commuting, worsening air quality and making children's journeys less active and more car-dependent.28 Focussing instead on quality, on community and on the connections between these is where we should invest our time and public resources.

2b. Promote the value of long - term investment in education

We need to re-think the value of schools centred on life-cycle costs and support the ability for schools to adapt over time with their communities, rather than just respond to the immediate but fluctuating demands for pupil places, which inevitably drives short term quality motives. In a school market where parents can exercise choice and funding follows pupils (as in the UK setting), schools have to provide the 'quality' as quickly as possible that parents demand or face falling enrolment, loss of money and ultimately closure.²⁹

We also need to create tools and processes that can better measure the long term value equation of schools for developers, in relation to the overall investment made in the area, not just going for immediate 'quick wins' over price and profit but allowing and encouraging re-investment in sustainable and socially responsible development. This could include lease deals brokered with non-direct school providers that could offset the initial capital cost of constructing a school. Only by partnering and collaborating with government, local authority, developers, designers, communities and schools, can we can provide a more mature response to the integration of schools in urban centres. This will balance the social infrastructure needs of a community alongside the practicalities of spatial and density constraints.

Building in additional initial capital and revenue costs to enable longer-term flexibility and resilience can add real value, which needs to be incorporated in cost-benefit analyses by national and local governments promoting and enabling long-term investment in education. As mentioned above, we already have examples of English community schools in Cambridgeshire and Hampshire that built in initial additional capital costs in support of social infrastructure. As Eleanor Young explained in the RIBAJ in 2016:

According to metrics from the government's Education Funding Agency, the cost of Hampshire schools is just above average on net costs. Bob Wallbridge [Hampshire County Council strategic Manager], who has visited enough of the cheaper schools to hear the despair in teachers' voices, is keeping a careful eye on this, trying to ensure that the figures reflect the lifelong value that Hampshire expects from its schools are built into analysis, along with elements that may be missing from projects at the other end of the cost scale, such as landscaping. And delight.³⁰

2c. Create community development strategies for education assets and programmes

Community organisations have themselves often owned or managed assets, including buildings and land. There is a tradition of UK community organisations' involvement in assets for over 400 years dating back to early charities, social movements and mutual organisations (including co-operative housing). Contemporary organisations owning or managing assets include development trusts, community centres, settlements and social action centres, village halls, city farms, housing co-operatives and community land trusts. However, examples for UK schools are few and far between. Scotland opened its first community owned school in 2019.31 Strontian Primary School was built after the community of around 400 people rejected Highland Council's plans to improve their old primary school building. The school, which has a roll of about 30 pupils, dated back to the 1970s and had been assessed as inadequate for both educational suitability and building condition. Community members raised a share of the capital needed and agreed a land and building swap deal with the local authority.

Overall the current scale of community ownership of land and buildings generally across the UK is unclear, and its applicability to schools not well evidenced. The suggested benefits include financial sustainability for community organisations, support for better public services and an empowered community. There are of course risks and liabilities in asset management. However, the principles behind such a move are also relevant to developers that truly want a community-based school. This needs:

- Meaningful community participation;
- Planning from the outset about how assets and utilities can be managed to generate income;
- Clarity as to how the assets generated by the development process will be managed on behalf of the community in perpetuity;

- Well-considered governance and legal structures for management that allow long term stewardship of assets;
- Explicit and appropriate financial frameworks for management and maintenance of community assets³²

25- National pupil projections in England: future trends in pupil numbers, July 2018 (2019 update) https://www.gov.uk/government/statistics/national-pupil-projections-july-2018

25

- 26- Emilia Plotka (2016) Better Spaces for Learning Royal Institute of British Architects (RIBA) p11 https://www.architecture.com/-/media/gathercontent/better-spaces-for-learning/additional-documents/ribabetterspacesforlearningpdf.pdf
- 27- Education Funding Agency Property Data Survey, January 2015 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/402138/
 PDSP Summary Report.pdf
- 28- Easton, Sue, and Ed Ferrari. (2015) 'Children's Travel to School—the Interaction of Individual, Neighbourhood and School Factors'. *Transport Policy* 44 (1 November): 9–18. https://doi.org/10.1016/j.tranpol.2015.05.023. See also page 27 of the government-commissioned report of the *Building Better*, *Building Beautiful Commission* (2020) Living with Beauty: promoting health wellbeing and sustainable growth which celebrates the walkable centres of older English cities and specifically mentions the schools that can be found there and the health, environmental and community benefits flowing from proximity and reduced car-dependency.
- 29- Gibbons, Stephen and Silva, Olmo (2008) Urban density and pupil attainment. *Journal of Urban Economics*, 63 (2). pp. 631-650.
- 30- Young, Eleanor. (2016) "Still serving society well" RIBAJ Online 27th January https://www.ribaj.com/culture/still-serving-society-well
- 31- Emma Seith (2019) " Scotlands first community-owned school opens"
 TES 28th August https://www.tes.com/news/scotlands-first-community-ow-ned-school-opens
- 32- For detailed research see Aiken, M., Cairns, B., and Thake, S. (2008)

 Community Ownership and Management of Assets https://www.jrf.org.uk/report/community-ownership-and-management-assets. Joseph Rowntree Trust

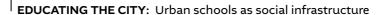
2d. Adopt a long life and adaptable approach to legacy and condition of new and existing schools

The quality of thinking that goes into the planning of school buildings, the landscape and the spaces within them is critical to how successfully they can be used. The more long-term adaptability that can be built in, the better, since pedagogic approaches change over time.³³

Since 2010 cuts in public spending in response to the recession have affected English education. For schools expecting BSF or other funding for new or existing buildings, this meant a sudden shift to unexpected maintenance costs, as buildings that had been planned to be knocked down had to be brought back into use. As the RIBA note, "by the time a replacement initiative - the £2.4bn Priority School Building Programme (PSBP) - for improving school buildings in the very worst condition was announced in 2011, it attracted almost three times as many applications as it could afford to fund".34 Matt Goodwin notes that PSBP is now largely recognised as dysfunctional and ineffective, repairing existing buildings with little regard for future planning, suggesting that these resources would be better utilized through a much broader strategic and visionary approach that does not simply replace and replicate the mistakes of the past.

This lack of ability to forward plan for the long-term, means that schools cannot use their assets effectively, let alone procure and manage more long life loose fit educational estates that can flex responsively to changing requirements.

Orchestrating capital funding for big building projects and then enabling a schools' ability to manage these assets effectively over several years both have implications for long-life planning. In support of the latter, the School Resource Management Adviser (SRMA) programme, was recently piloted and evaluated by the Education and Skills Funding Agency (ESFA) but centred its focus on identifying opportunities where trusts could improve efficiency/increase their revenue generation, mainly through managing staffing deployment and associated curriculum matters.³⁵ It is unclear from the reporting to date how income generation from community engagement was costed or where and how savings were made.







27

Young Library Proposal, New South Wales, Australia

Completed: Proposals in development

Client: School Infrastructure New South Wales

Architect: Hayball Architects

Image credit: Hayball Architects

The project will deliver a new joint-use library and community facility, funded under a partnership between Hilltops Council and the NSW Department of Education. The new two and a half storey facility will be located on Young High School grounds and integrated with Carrington Park. During school hours some spaces within the new library will be reserved for sole school use, and some spaces will be reserved for sole community use. After school hours, most of the spaces will be available for the community. Further information about this project can be heard via the link below to the University of Melbourne conference, Schools as Community Hubs, 2020.

³³⁻ Wallbridge, B. (forthcoming) "How and why we should design and build schools today" in Wood, A. and Burke, C., Educational Aims and Values through Architecture, [Self-published]

³⁴⁻ Between 2015 and 2018 Government will spend £4.2bn across schools, local authorities, academy trusts and voluntary aided partnerships towards essential school maintenance – a sizeable chunk of money which could have been avoided. Emilia Plotka (2016) Better Spaces for Learning Royal Institute of British Architects (RIBA) p14

³⁵⁻ ESFA (2020) School resource management advisor; pilot scheme https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/860823/School_resource_management_adviser__SRMA_pilot_evaluation_report.pdf

3

Join Up The Thinking

THE PROBLEM: disconnected procurement policies and practices

Government policy is extremely slow in reacting. I'd say 20 years out of date. Developers respond to the challenges they are given and if those opportunities aren't there, it doesn't happen.

Matt Goodwin, Managing Director, Architecture Initiative

Many working in the education sector struggle with the seeming imbalance and disconnect between different government departments in their various policies and practices around procurement, design quality, standards and requirements. Educational guidelines at national and local levels are also fragmented and inconsistent. This results in a lack of innovation or flexibility. This is because currently educational building procurement is predominantly framed as an operational and technical problem, an approach that ends up preventing deeper stakeholder or public debate around the quality of school building, its multiple functions, the need for urban and local integration, and for the social sustainability of schools. The mechanical 'one-sizefits all' approach was called 'a new low', several times in our consultations that is inhibiting more integrated, coherent and evidence-based responses, vital to creating high-quality education provision. In this context, it is essential to explore new strategies for enabling holistic approaches that can enable innovative forms of delivery:

Procurement of school buildings is clearly hampering quality. Delivery agencies are hidebound by expensive and ineffective procurement frameworks. The delivery of off-the-peg solutions that do not necessarily flex to the context. [This] is not helped by the confused and inconsistent frameworks of the local education authorities and DFE.

Richard Coppell, Development Director, Urban and Civic Comparing education to other socially vital areas such as healthcare and housing, policy level incoherence is even more obvious. With housing, deeper policy questions are being asked; for example, through the Building Better, Building Beautiful Commission for Housing³⁶ that centres on making a case for design quality. In education too, we need to be asking questions about schools and design quality and about how schools can offer more to their localities when social infrastructure is seen as a fundamental necessity, not just a 'tick box' requirement.

3a. Work towards holistic approaches

Examples exist of more integrated approaches. The London Plan Social Infrastructure SPG Policy 3.18 (Sections E, F,G)³⁷ strongly supports development proposals which maximise the extended or multiple use of education facilities for community of recreational use; and encourages co-location of services between schools and colleges to maximise land use, reduce costs and develop the extended school or college's offer. This includes supporting the on and off-site sharing of services and the co-location of schools with housing to maximise land use and reduce costs.

In practice, implementation of these policies can often be hampered by a lack of operational sophistication or of community involvement which results in a high level of segregation of the supposedly shared resources. In the case of co-located housing, short term financial gain often drives the design of housing, prohibiting larger family friendly apartments, or key worker housing provision.

³⁶⁻ Building Better, Building Beautiful Commission (2020), Living with Beauty: Promoting Health, Wellbeing and Sustainable Growth, January

³⁷⁻ The London Plan 2016, Chapter Three: London's People, Policy 3.16 Protection and enhancement of social infrastructure, p128 https://www.london.gov.uk/ sites/default/files/the london plan 2016 chapter 3 updated ian 2017.pdf

An example is the Scottish School Estate Strategy, which starts as follows:

Our vision is for schools which signal the high value we place on learning; which people and communities can enjoy using and can be proud; which are well designed, maintained and managed and which encourage continuous engagement with learning; which are far more than just 'educational establishments' whose quality of environment supports an accessible range of services and opportunities and which enrich the communities they serve and the lives of learners and families.³⁸

Another example is the Scottish Futures Trust, on behalf of the Scottish Government. The initiative reflects a Scotland-wide approach to the delivery of new community and social infrastructure, with the public sector participants (the NHS, local authorities, police, fire and rescue, and ambulance services) having entered into a long-term arrangement with the Hubco (a public/private joint venture) for new building facilities with a capital value in excess of a pre-defined threshold where procurement is commenced within 10 years of the Territory Partnering Agreement (TPA) signature. Bertha Park High School is one of the most recent schools to have been delivered through this programme in Perth, Scotland.

Managing the school estate thus becomes part of wider local government asset management planning and needs to be connected both to related community planning processes, including local regeneration strategies, and to the asset plans of private sector partners. This may also mean working with others to identify the longer term role of schools and their relationship to other local facilities, such as libraries, leisure, health and childcare facilities.

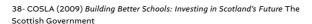
3b. Leverage value through integrated metrics

Current cost metrics hamper creative thinking, not towards 'unnecessary extravagance' but towards enhancing the usability and flexibility of the school stock over time. Simultaneously, bureaucracy and lack of accountability between and across departments prevents debate about new types of cost-effective innovation that can make commercial sense out of leveraging mixed use; or community-centred schools that can act as lead assets on larger housing developments. As Richard Coppell argues, "[Urban and Civic] find that we can build better for less and are therefore prepared to take cost risk to improve outcomes for both education and place making."

3c. Create spaces for sharing debate, research and development

The current policy regime treats schools as independent entities in competition with each other. There is little space or time for gaining or sharing expertise developed through time or based on research or evaluation. But without evidence informed practice, or high-level discussions, we cannot learn from, or improve what is currently being built. Arguably, urban schools, through close proximity both to other schools and educational establishments, as well as an array of learning-centred social infrastructure, have greater capacity to share resources and knowledge with one another. This could take the form of shared teaching resources, especially through growth of online learning, as well as shared physical spaces such as larger more sophisticated sports and recreation hubs, or music and performance facilities or shared libraries.

In addition, stakeholders from across the sector would benefit from opportunities to share expertise and experiences, underpinned by funded support for relevant research and development and discussion papers. Without a framework for producing, disseminating and discussing opportunities and challenges of current developments in education, schools remain 'stuck' in existing patterns, or only change on the basis of individual or organisational commitment.







Ark Soane Academy, London, UK

Completed: Phase 1 opening 2021

Client: LocatED, Department for Education

Architect: Architecture Initiative

Image credit: Architecture Initiative

The new Ark Soane Academy, on the site of the former West London and Acton College campus, is an example of a mixed-use education and residential development in a dense urban area. The scheme design looks beyond the delivery of a school to the wider urban and community benefit opportunities. This includes the provision of a new public route on school land which connects residential areas to the local high street, and makes accessible an historic woodland park – a space formerly degraded by anti-social behaviour through lack of access and passive surveillance. Through the development of a mixed-use proposal, the scheme will deliver over 100 new homes on a site which would, as a result of education use classification, not otherwise have been available to residential use. When complete, the development will comprise a 1200 place secondary school alongside the housing, with community accessible indoor and outdoor sports facilities.

4

Enable
Schools
To Deliver
Community
Support

EDUCATING THE CITY: Urban schools as social infrastructure

THE PROBLEM: overcoming operational constraints

"equity [should be] at the heart of national decisions about education policy and funding

Marmot et al., 2020:57

Public institutions exist to serve the public and therefore are obligated to develop programs and services that meet continuously changing public needs.

Roger Hiemstra (1997) The Educative community³⁹

Many schools already aim to work with their local communities but struggle with the multiple managerial, operational and regulatory constraints that hinder the easy management or use of school facilities for communities, or the expansion of connections with local communities beyond pupil cohorts and their parents or carers. Without a commitment from national government or local authorities, school principals, teachers and governing boards find themselves sorting out ways to enhance community provision on an individual case-by-case basis, with little support guidance or building up of re-usable knowledge. This is both time-consuming and exhausting.

In addition, long term procedures need to be in place to create sustainable integration because connecting financing, governance and operation are critical to successful inclusion/integration of community infrastructure into schools. This was a key lesson of South Melbourne Primary School, where the high-level thinking and planning had been done but successful operation has been challenged by inadequate resolution at the level of day-to-day management and funding.⁴⁰

4a. Enable schools to support 'levelling up'

Schools are being constrained in what they can offer as social infrastructure because policies, costing models and management/operational issues all restrict increased community engagement. For schools in areas that already have good local facilities, and where many parents and carers already have individual financial and social resources to support their children, the vital requirement of education as a public good is of less significance. But in low-income and under-resourced catchment areas, schools are central to enabling equality of opportunity for the next generation of learners and their families.

In so-called 'left behind' or 'ignored'⁴¹ communities failure to support schools and their wider community-focused activities can become an existential problem⁴² and so serious efforts to 'level up'⁴³ are needed. As well as the other principles outlined in this paper, this means making it operationally and financially possible - and even beneficial - for schools to act as a centre of public good in their neighbourhoods.



EDUCATING THE CITY: Urban schools as social infrastructure

4b. Provide guidance for community management and operations

Both the Department of Education Northern Ireland (DENI) and the Public Policy Unit for Wales have produced guides to increasing the community use of school facilities.⁴⁴ There are also examples of good practice internationally.⁴⁵

The DENI guide, for example, provides a toolkit for school managers to help them make their facilities available and to form community partnerships. They summarise essential features as follows:

- Strong co-operative relationship between partners;
- □ Local leaderships and a desire the make things happen;
- ☐ Clarity amongst partners on how the facility will be managed;
- ☐ A sound understanding of practical issues such as insurance and finance in sharing facilities;
- Putting in place arrangements that will deliver benefits to both the school and the wider community.
- The guide also provides very practical management and logistical advice for schools, around service and maintenance costs, income and funding streams, and legal and security issues.

We need to recognise poverty and inequalities in access to education, where schools are in a mess, or have experienced reputational harm, or are in areas of deprivation. When there is no money, there is no interest and it is the children who get to be the losers.

Adrian Packer, CEO, Core Education Trust

³⁹⁻ FHiemstra, Roger. (1997) 'The Community School' reprinted by infed.org: education, community building and change. https://infed.org/mobi/the-community-school/

⁴⁰⁻ Informal feedback from Richard Leonard and Fiona Young, Hayball Architects, Australia

⁴¹⁻ Marmot et al., 2020:94

⁴²⁻ Natarajan, Lucy., Ilie, Elizabeta., & Cho, Hyunji. (2020) Civil Society Perspectives on Inequality: Focus Group Research Findings Report Bartlett School of Planning UCL

⁴³⁻ Tomaney, John and Pike, Andy. (2020) Levelling up? *The Political Quarterly* January-March Vol 91 Issue 1 p43-48

⁴⁴⁻ DENI (2014) Community Use of School Premises: A Guidance Toolkit for Schools, and Dyson, Alan et al (2016) Increasing the use of school facilities Public Policy Institute for Wales

⁴⁵⁻ Department for Education and Child Development (2017) Schools as Community Hubs: a practical guide for schools and pre-schools Government of South Australia

5

Design-In
Community
Potential
From The
Beginning

THE PROBLEM: schools are seen as standalone institutions

Urban schools typologies have been evolving for some time, not just in the UK, but globally as a result of increasing pressure on funding and escalating land and property prices. Mixed-use and high-rise schools are increasingly common, maximising the potential for other higher value developments to be built, the sale of which can offset the high land value for the school. However, in these developments, innovation in school design to increase the social value of the educational asset is very rare. While some new mixeduse developments and procurement methods⁴⁶ in the UK are seeking to give greater consideration to the social value of schools as part of wider development initiatives, further work is needed to improve the integration of new schools within their communities and maximise the value and access to these expensive public assets.

> [We are] constrained by policy in design bulletins, we are seemingly designing to the lowest common denominator

Richard Coppell, Development Director, Urban and Civic

In the current context, planning guidance usually fails to take into account the availability of other civic resources locally; the already existing intangible personal and community-based expertise and needs of a community; and potential savings in sharing or multiplying uses of facilities. Of course this is sometimes challenged on a scheme-by-scheme basis, but with funding tied to a bottom line area figure there remains little room for manoeuvre. Without flexibility and long-term adaptability designed in, end users have to be very creative to manage productive connections with localities. What is more, the conventional building

type of a group of buildings isolated behind gates, with limited usage assumed during evenings, weekends and holidays, is reducing potential whilst remaining a very poor use of public resources.

5a. Integrate social infrastructural issues into design briefing

If schools are also 'community hubs' then not only policy agendas but also briefing processes need to incorporate provision for a range of community services and activities.

Designs need to explicitly enable community use of both indoor and outdoor facilities within the school estate by making schools more open, accessible and welcoming at all times – to entice the community in and continue to engage with learners. The layout needs effective orchestration of public and private zones to enable opening of different sections of the school at different times of day/week/year; and to support the school in managing security and cleaning and maintenance.

Secondary schools typically contain significant main halls able to accommodate large numbers of pupils. Where design and management enables it, these spaces already often provide and host a range of activities such as film nights, talks, presentations, and other activities as well, provided seating is moveable and external access to only these facilities is designed in. Classrooms are easily adaptable for adult education in the evening and weekends if public access is easily controlled. Similarly, shareable outdoor spaces - particularly in dense urban spaces - can provide much needed respite and recreation. Opportunities also exist for community libraries attached to schools which could be shared and jointly funded to provide a community asset.

Where there are predictable problems - such as

5b. Develop flexible space management systems

In order to move beyond the operational complexities of implementing mixed and joint use of school facilities, principals need support both in setting social objectives and in being able to be economically effective. Developers and school administrators such as Kajima are now looking at more flexible ways of managing their premises, for example, by creating a digital platform for space hire – a sort of Air BnB for schools. This is an effective way of enabling space hire/ pop-up/growth and contraction/sharing with publicprivate facilities.

Digital management platforms as well as digital engagement with people can reduce management costs and paperwork while increasing reach and accessibility as well as delivery of services that will have the most impact for the community.

These same tools could be used for managing expansion and contraction of schools in local areas. If buildings are designed in a flexible enough manner, there could be opportunities for a kind of plug-'n-play design, allowing community use of underutilised parts of the school in a pop-up style. This relies on some changes to the school design.

School / community buildings should be designed to be flexible enough to provide opportunities for retail/commercial lettings, for example through a shell & core style building arrangement that allows for flexibility when needed. This is particularly pertinent in the current pandemic as we all change our patterns of working, learning, and leisure. There is an opportunity for local business hubs to be established which would enhance integration, fulfil a local need and generate a revenue stream for the school.

Matt Goodwin, Managing Director, Architecture Initiative

This strategy only works well for developers with a forward lease arrangement, and through a degree of extra space generosity in initial build to allow for a variety of uses - the current 55m2 classroom with rigid fixtures and systems is too restricted. In the case of conversions, it may also depend on limitations of existing structures; for example, floor to ceiling heights. In new schools, allowing for greater generosity of ceiling heights and flexible structural design will also allow for future adaptability of the building to meet changing needs and uses.



⁴⁶⁻ Department for Education. (2019) Securing developer contributions for education, November https://assets.publishing.service.gov.uk/government/ $uploads/system/uploads/attachment_data/fil/909908/Developer_Contributions_data/fil/9$ Guidance_update_Nov2019.pdf

⁴⁷⁻ COSLA. (2009) Building Better Schools: Investing in Scotland's Future The Scottish Government

5c. Build 'bridges' not fences

It is always an enormous challenge to prevent schools from being ensconced behind fences, and to design them in such a way that the area that belongs to the school, strictly speaking, remains part of the street and hence remains accessible to children from the surrounding neighbourhood....we should constantly be on the looking for devices that can promote harmony between school and neighbourhood. With the relentless drive towards individualisation, too many social systems that once provided solidarity and cohesiveness have been eroded or dismantled altogether...hiding behind rights and rules that are translated architecturally into walls and fences...

Herman Hertzberger⁴⁸

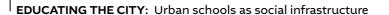
In this country, generally accepted barriers between the space for children's education and the space of cities are rarely challenged. We know that building fences around schools to lock kids in and keep the community out is not a positive position, either visually or physically. Yet, the position persists that schools must be gated environments that physically prohibit access in order to maintain a safe environment. 39% of sports facilities in England are trapped behind school gates.⁴⁹

In primary and secondary schools building entrances are highly constrained and often guarded by biometric security gates; reinforcing an insider - outsider relationship that signals who is welcome/expected and who is not. These spaces are often further guarded behind a series of security fences, which prohibit entry during the school day. These spaces discourage anyone from approaching a school who is neither parent, pupil or staff and effectively ensure that the spaces within are perceived to be inaccessible.

While issues of security are not to be downplayed, a shift in policy is needed to end this entrenched view that fences are inevitable.

There are many examples of both 'hard' and 'soft' 'solutions to this problem. For example, the built fabric of the school can itself present the secure line, rather than being setback and behind a fenced enclosure, such that the front door of the school directly meets the public realm. A balanced position can also be found, as with the Servete Maci school in Albania, where an area of unfenced public realm is provided within the school boundary giving access to certain parts of the building - those most actively used by the community. Pupil and school entrances can then be managed through a reduced and less visually obtrusive arrangement of physical barriers. Howard Smith, Senior Vice President of Investment at Keppel Capital, suggests giving parents and carers a choice with some secure drop-off/ pick-up as well as more public entrances; noting that "it is important not to design for the lowest common denominator". Hard systems, including CCTV and direct sight-lines can support these approaches.

Dr Julia Atkin, an independent education and learning consultant who has worked with educators in Australia and internationally, approaches the design of schools with communities to develop local soft systems, by having explicit measures and making agreements and protocols between schools and communities, with integration as a basic principle. This needs to be embedded in community development processes, with strategies that support positive behaviours, based on long term commitments. By making sure users and the community are involved in working out the security requirements and design for positive behaviour, the assumed need for separation as the only form of protection can be challenged.







Servete Maci School, Tirana, Albania

Completed: 2019

Client: Municipality of Tirana

Architect: Studioarch4

Image credit: Besart Cani

Servete Maci is a 600 place primary and secondary school in Albania, for which the vision was to create a community place. Studioarch4, the project's architects note that a well-functioning society is built upon a developed grid of public spaces and community centres, but developing countries like Albania show a shortage of inherited public spaces, which in turn makes it a challenge to allocate new ones within the existing infrastructure. The development of schools can be seen as a sensible solution to this issue. Considering that schools have been sited strategically to serve the neighbourhoods and communities throughout the history of civilisation, it is easy to see how they can function as community centres as well.

EDUCATING THE CITY: Urban schools as social infrastructure

5d. Change the standards: long life, loose fit

Many suggest that the underlying financial model for much building development and construction is too focused on short-term profit, resulting in buildings built in the 'cheapest, dumbest way possible'.⁵⁰ Here we have argued that schools should be guided by socially accountable polices, that re-think value. This means adopting a more flexible approach to the rules governing the design and size of new schools, to allow for the best possible use of resources - not by just adding more space but by designing that space more effectively to maximise multiple uses, to support social infrastructure and to future-proof against unexpected change.

Alex Gordon, in his role as President of the Royal Institute of British Architects, defined 'good architecture' in 1972 as buildings that exhibit 'long life, loose fit and low energy'. ⁵¹ Current space standards for schools in England urgently need revisiting through a strategy about, and commitment to, both joined-up thinking and a long-term view centred on the importance of education, in support of communities and the public good.

5e. Urban Schools providing public open space

Finally, urban schools offer another benefit through the provision of new and diverse types of urban spaces. Where schools are needed in dense urban areas, is this not an opportunity to consider ways of creating more spaces for the public? By pooling financial resources from a variety of social infrastructure pots, this surely represents value for money for the community? The need for local urban public spaces has become particularly evident throughout the pandemic, when parks and other open spaces in local communities are at capacity, and yet large school playgrounds have remain gated and inaccessible.

When moving our thinking towards schools as social infrastructure, allowing social activity at low or no cost, in the form of physical facilities (sports halls, community centres, libraries etc.), but also as informal spaces, meeting places, and places for spontaneous interactions, this presents a chance to think about how schools might provide and facilitate opportunities

within but also beyond their boundaries for groups beyond the scholastic body. It is particularly important to embed and make familiar this way of thinking about community schools and community use to planning and design professionals, and bring ideas from planning to the service of thinking about the future of education and ultimately make schools are a more dynamic proposition.

Through this discussion paper we want to challenge current policies and policymakers, designers, and school leaders to consider new ways of thinking about schools, communities and social infrastructure. We hope that this report will create space and opportunities for informed debate and new ideas; and present a framework for unlocking the value of schools as social infrastructure.

They way [schools are] planned, designed and programmed shapes the interactions that develop in and around them. For students, teachers, parents, and entire communities, schools can either foster or inhibit trust, solidarity and a shared commitment to the common good. They can also set boundaries that define who is part of the community and who is excluded. They can integrate or segregate, create opportunities or keep people in their place.

Eric Klinenberg⁵²





European School, Copenhagen, Denmark

Completed: 2018

Client: City of Copenhagen, Carlsberg Byen P/S

Architects: NORD Architects and Vilhelm Lauritzen Arkitekter

Image credit: Adam Mørk

The European school takes the idea of removing hard boundaries one step further than most, through a network of routes at various levels through the site which are open to the public, promoting modern learning landscapes whilst merging school and city together with these open public spaces. Clever gestures, such as the location of the sports hall on the site periphery to directly address the community ensures the facilities are widely visually and physically accessible. The school building clearly addresses the site context, and pupil entrances are celebrated on the street.

"The relation between the institution and the city becomes a 'win win-situation' where spaces, functions and square meters are shared, thus creating a social sustainable utilisation of valuable urban areas". Nord Architects and Vilhelm Lauritzen Arkitekter

⁴⁸⁻ Hertzberger, Herman and de Swann, Abram (2009) *The Schools of Herman Hertzberger* Rotterdam; 010 Publishers. p17

⁴⁹⁻ Greater Sport (2020) "Schools encouraged to open up and make the best use of their sports facilities" 19th January. https://www.greatersport.co.uk/news/schools-encouraged-to-open-up-and-make-the-best-use-of-their-sports-facilities

⁵⁰⁻ Simon Allford of AHMM (2017) NLA Talk. http://legacy.newlondonarchitecture.org/news/2017/september-2017/the-time-is-right-for-long-life-loose-fit

⁵¹⁻ Gordon, Alex. (2014) "Measuring Good Architecture: Long life, loose fit, low energy," September European Journal of Sustainable Development 3(4): 163-174

⁵²⁻ Klineberg, Eric. (2019) Palaces for the People. How social infrastructure can help fight inequality, polarisation and the decline of civic life Penguin Random House.

Acknowledgements

We would like to think all the participants in this project, who have given up time to discuss schools as social infrastructure, to share their expertise and experiences, and to comment on multiple drafts of this discussion paper. We owe particular thanks to Lara Newman, Chief Executive of LocatED, and Matt Goodwin, managing director of Architecture Initiative who were central to initial discussions and the development of the project. Javiera Godoy and Nicki Mangan have provided excellent project assistance throughout, as have BREI administrators Peter Humphries and Rosi Hirst with financial administration. We have benefitted enormously from the input of Dr Adam Wood Research Fellow, Centre for Teachers and Teaching Research, UCL Institute of Education, and thanks to Darren Connolly, Technical Director of Building Services at WSP, for contributions to our discussion of mixed-use schools and sustainability. Finally, we would like to thank UCL Innovation and Enterprise (VP) for funding this work.

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