Beyond the School Fence: Rethinking Urban Schools in the Twenty-first Century

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ABSTRACT
Schools have traditionally been black-boxed in urban planning, in Australia and elsewhere. During the twentieth century, the shaping of a "community within a community" that informed liberal educational thought materialised in campus-style schools that were exempted from local planning laws, contributed to sprawl and car dependency, and duplicated facilities provided by local authorities. Advocacy of compact city forms underpinning recent urban policy calls for a rethink by education and planning authorities of how schools engage with their urban surrounds. Focussing on Melbourne, Australia, this article discusses some challenges for the provision of schools and schooling in twenty-first century cities.

1. Introduction
In his 1948 Australian tour the pioneering British town planner Sir Patrick Abercrombie (1948) argued that schools were defining elements of local neighbourhoods and a central concern of modern planning. Abercrombie's counsel fell on deaf ears. Notwithstanding the recent revival of policy rhetoric about schools as "community hubs" (McShane 2012), the provision of schooling has been a significant gap in urban planning and urban research in Australia. With the exception of journal articles focusing on schools involved in local planning conflicts (Bugg and Gurran 2011, Taylor and Marais 2011), and incidental discussion of schools and schooling in planning textbooks (Gurran 2011, Thompson and Maginn 2012), the recent Australian-focussed literature has paid little attention to intersections between educational planning and urban planning. This deficiency is replicated internationally. The urban planning literature shows few explicit links between educational planning and urban or spatial planning (Vitiello 2006, Gulson and Symes 2007, Bierbaum et al. 2010, Billingham 2013). In turn, the literature on school planning and design has concentrated on the design of learning and teaching environments, with limited attention to the world beyond the school fence (Organisation for Economic Cooperation and Development (OECD) Centre for Effective Learning Environments 2011).
At a practice level, Banerjee (2015) provides some examples of international experimentation in “educational urbanism”, but puzzles over why research into the value of situated learning and community education, stretching back to the mid-1800s, has had such limited impact on city planning. Recent attempts to close the gap between educational and urban planning in Australia have underscored the difficulty of successful policy implementation in complex governance environments (Honig 2006).

Focussing on the state of Victoria, the adoption of precinct or master planning at the local level is designed to open the “black box” of school planning which traditionally has been a top-down, state-level activity. Victoria’s precinct structure plans (PSPs) underpin development in urban growth areas, aiming to manage urban amenity and ensure the timely provision of infrastructure, including schools. The reservation of land for both government and non-government schools under this model reflects contemporary neo-liberal educational policy centred on promoting school choice (Metropolitan Planning Authority 2015). This process has its critics. For example, the Ministerial Advisory Committee (2015) advising on the Victorian government’s revision of Plan Melbourne raised concerns that the planning focus on outer Melbourne is detracting from the appropriate re-development of established areas, and there was also a propensity for PSPs to “lock in” future land uses and housing densities. Nonetheless, the PSP process goes some way to overcoming structural impediments to bringing education to the planning table.

This article seeks to encourage dialogue between education planning and urban planning by examining school provision in the context of Melbourne’s urban growth. Our interests lie beyond the design of educational services, focussed on school campuses, to understand the engagement of schools with urban settings, particularly in regard to the role schools might play in addressing major social and environmental challenges of cities.

Policy and planning responses to growth and environmental pressures in Australia’s major cities have, with varying success, pursued a “smart growth” or compact city vision, seeking to constrain geographic expansion on the urban fringe by focussing development around transport hubs and suburban activity centres. In Melbourne, Australia’s fastest growing capital city, this planning vision also seeks to balance rapid vertical or high-rise expansion in the inner city. These developments call for a strategic and integrated response to urban intensification and its emerging challenges by education providers and city planners.

To frame this discussion the article seeks to move beyond the “school as community hub” discourse to explore wider connections between schools and cities. It does so by reworking an established construct in the education literature: the urban school. As detailed below, the original construct focussed on race, class and inner cities as compounding markers of educational disadvantage. While disadvantage remains a salient issue for both educationists and city planners, changing urban demographics challenge the original meaning of the term “urban school”. Victorian planning documents have begun using the rhetoric of urban schools to identify design parameters and educational needs of schools in conditions of land scarcity in inner Melbourne (for example Learning By Design et al. 2010, Tweeddale and Herel 2010). This article seeks to extend this discussion by examining four vital policy issues for twenty-first century urban schools: the educational demand cycle, the coordination of education, transport and housing policy, environmental sustainability, and digital connectivity.

The article begins with a brief discussion of our reworking of the original conceptualisation of the urban school. Then follows a discussion of Melbourne as an applied context for examining the engagement of schools in urban settings. The third section sets out the rationale for focussing on the four issues listed above, and examines each in turn.

The article draws on analysis of policy and critical literature relating to educational and urban planning, as well as interviews with state and local government officials and fieldwork associated with a research project on the community use of schools. The project was funded by the Australian Research Council (LP110200550) in partnership with the Victorian Department of Education and Training. The article focuses mainly on the government school sector, although, as the PSP process indicates, wider policy settings recognise the significance of the non-government sector—which caters for approximately one-third of Victorian students - in educational provision. The discussion encompasses both primary and secondary schools, as detailed in specific examples.
2. Rethinking the Urban School

The vocabulary of urban schooling emerged in educational theory and practice in the 1960s as a marker of educational disadvantage connected with racial and class stratification in inner cities (Grace 1984, Steinberg and Kincheloe 2004, Foster 2007, Franklin 2010). This association of problem schools and inner cities came under strain with changing urban demographics in the late twentieth century. In advanced Western economies, many schools with the educationally disadvantaged characteristics once associated with urban schooling are now located in outer urban or rural areas (Russo 2004, Ehrenhalt 2012). In contrast, inner city schools are now, at least in some areas, seen as agents of urban revitalisation or gentrification (Butler and Robson 2003, Cucchiara 2013, Hyra 2014, Wu et al. 2015), and the OECD has identified an “urban advantage” in the superior performance of students in population centres over 100,000 in almost every country that participated in the 2009 Programme for International Student Assessment (Organisation for Economic Cooperation and Development 2013a).

The small amount of literature that deals with urban schooling in Australia adopts the conventional focus on educational disadvantage (for example, Lawrence 1994, Baxter and Meyers 2016). However, the concept has not strongly informed Australian educational policy and critical analysis, leaving a space that is relatively free of entrenched or defensive actors and positions.

What do we mean by an urban school for the purposes of this article? Urban locations are characterised by their relatively dense and diverse populations, institutional and service clusters, flows of people and information, and economic activity. Urban locations are also distinctive ecologies and areas of concentrated resource consumption. The concept is not restricted to inner cities, but applies at scale across metropolitan and regional centres. Although some analysts define an urban school quantitatively (Organisation for Economic Cooperation and Development 2013b), our approach is qualitative, focusing on the relationships of schools with their urban settings.

3. Schools and Cities: Policy and Practice in Victoria

The expansion of state education systems in Australia coincided with the development of suburbs in Australia’s urban morphology. While there are surviving examples of early inner-city schools on constrained sites, Australian school developments have typically followed a nineteenth century educational model that sought to bolster liberal learning and school identity through the provision of playing fields and ancillary facilities as well as classrooms. The conscious shaping of a “community within a community” reflected the professionalisation and corporatisation of schooling, and desires to separate school-based learning from socialisation processes and physical environments that were seen as harmful to proper development (Cutler 2000, Campbell and Proctor 2014). The low-density configuration of Australian cities supported this model through the twentieth century, and it is institutionalised and standardised in site specifications. For example, the Victorian school facilities schedule requires 3.5 hectares of land for primary schools and 8.4 for secondary schools (Bok 2011).

Both the pedagogical foundations and the physical template of this model have come under strain. Criticism of a transmission model of instruction, delivered within the mono-functional “containment space” of the classroom, has featured in educational debate for at least half a century (Banerjee 2015). Specific to our concerns here, critics have pointed to the social and environmental impact of “big box” campus-style schools, as contributors to suburban sprawl, car dependency and greenhouse gas emissions (Haar 2003, Strickland 2003, Tachieva 2010, Reid 2011). Large high schools have been criticised for their poorer student outcomes compared to smaller counterparts (Leithwood and Jantzi 2009), and for their negative impact on neighbourhood sociality and walkability (Hillier 1996). Land economies, site constraints and pressure on public sector outlays are encouraging policy interest in the increasing use of extra-mural resources such as public libraries and recreation facilities, as well as the sharing of facilities on both government and non-government school campuses (Victorian Competition and Efficiency Commission 2009). The emphasis of policy debate encourages extended use of schools’ facilities and more porous boundaries between schools and surrounding neighbourhoods. This policy
is not without its critics. Investment in new urban schools, such as a senior secondary campus sited in a northern Melbourne town centre, was described as “penny pinching” in the allocation of learning and recreation space (School Official 2013).

The re-population of inner cities has prompted new policy, design and market interest in urban schooling. The Victorian department of education has commissioned what it refers to as the state’s first “vertical government school” in South Melbourne, “designed to be fully embedded in neighbourhood life”, and incorporating community services and civic spaces (Victorian School Building Authority 2016). Non-government schools have sought to establish inner-city campuses, and identified a new market in international school students (replicating the practice of Australian tertiary educational institutions on both counts) (Haileybury 2015, Melbourne City School 2015, Jacks 2017). Along with the adaptive re-use of existing building stock for schools, inner urban residential developers are integrating schools or early childhood centres into their designs, in part as a concession to obtain planning approval (Dow 2013). The incorporation of schools and other education facilities in inner-city high-rise projects has generated significant publicity on “skyscraper schools” (Winter 2013). Accordingly, inner Melbourne’s changing skyline has brought new research interest in the needs and experiences of young people living in a “vertical” environment (Whitzman and Mizrachi 2009).

There is some congruence between urban planners and educational planners on the challenges for cities and for schooling in the twenty-first century, as illustrated in Table 1. However, the lack of dialogue between the two domains, in Victoria at least, has powerful institutional underpinnings. The Planning and Environment Act 1987 makes provision to exempt state government educational facilities from local planning schemes, through a section (s16) which “provides essentially unlimited scope to bypass the normal requirements of the Act” (Victorian Government 1988, Rowley 2017, p. 141). The non-government school sector is not covered by the exemption, giving rise to the curious situation where the (exempt) state education authority publishes “town planning guidelines” for non-government schools (Department of Education and Early Childhood Development 2008). These jurisdictional barriers are reinforced by the different registers or objects of planning: the individual student for the state, spatial precincts for local authorities.

The Neighbourhood Renewal policy introduced by the Victorian Labor government in 2001 (Klein 2004), which included a focus on school regeneration and involved dialogue between the state departments of education and planning, along with initiatives of the Growth Areas Authority (later the Metropolitan Planning Authority) in precinct-level planning, have gone some way to overcoming these barriers.

The novelty of these moves was acknowledged by a senior local government official, commenting on a project to integrate educational and spatial planning in an urban renewal context:

[It was] really valuable to have Education along with some other government departments sitting at the table… some of them acknowledged that they’d never done that before, they didn’t sit around and plan geographically … it was a time of enlightenment (Local Government Official 2013).

Table 1. Intersections of Urban Planning and Educational Planning.

<table>
<thead>
<tr>
<th>Urban Planning</th>
<th>Educational Planning</th>
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<tr>
<td>Challenges for Twenty First Century Cities</td>
<td>Principles for Twenty First Century Schools</td>
</tr>
<tr>
<td>• economy (work and wealth)</td>
<td>• lifelong learning</td>
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<tr>
<td>• society (social cohesion)</td>
<td>• community building and social cohesion</td>
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<td>• shelter (housing for all)</td>
<td>• ecological sustainability</td>
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<td>• environment (stable ecosystem)</td>
<td>• resource sharing and adaptive re-use</td>
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<td>• access (resource-conserving mobility)</td>
<td>• digital connection</td>
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<td>• liveability (quality of life)</td>
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<td>• democracy (voice and participation)</td>
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However, a recent policy emphasis on shared or extended use of school facilities has more typically steered conversations across state and local jurisdictions in Victoria (Department of Education and Early Childhood Development and Department of Planning and Community Development 2007, Department of Education and Training 2005). Notwithstanding the virtues of more efficiently using school infrastructure, this policy privileges functional and service relationships occurring behind the school fence, rather than integrating schools with urban planning. In such a policy setting, local planning may be reactive, concerned with adjustments to state-level decisions. In particular, a recent return to devolved or school-based decision-making (Department of Education and Early Childhood Development 2011) typifies policy valency in this field:

Education's approach in terms of wanting to open up the schools, changing the learning paradigm, making the grounds accessible and the facilities accessible after hours was pretty consistent in terms of our planning but at the time when this started in the early 2000s, up till then we had to deal with individual principals, and they could change. You might get a principal that said "yep, let's bring down the fences" and the next principal says "let's put the fences up" ... We [don't] want to go back to a situation of dealing with individual principals (Local Government Official 2013).

This real and figurative concern with the school fence suggests the continued resonance of the “community within a community” ideal, reinforced, indeed, by frequent reference to the “school community” in government policy and school-based communications (Department of Education and Early Childhood Development 2011). The urban school construct advanced in this article seeks to move beyond this normative sociology of schools to focus on the planning and pedagogical relationship between schools and cities.

4. Setting the Scene: Melbourne as a Growth City

Melbourne provides an instructive Australian setting for this discussion. Metropolitan Melbourne grew faster than any other Australian city in the first decade of the twenty-first century, and is projected to overtake Sydney as Australia’s largest city by mid-century (Australian Bureau of Statistics 2012). Recent growth has been fastest in inner Melbourne and the outer urban growth areas, with earlier planning visions for infill growth around suburban activity centres faltering.

In the space of two decades the tenor of Melbourne’s planning narrative has changed dramatically. Where concerns were voiced about depopulation and underutilised infrastructure in the Victorian government’s 1987 document Shaping Melbourne’s Future (Ministry of Planning and Environment 1987), attention is now on the diminishing capacity of current infrastructure and policy options for future provision (City of Melbourne 2014, Victorian Government 2014).

The population of inner Melbourne, defined here as the five central Melbourne local government authorities, is projected to increase by 2.4% each year between 2011 and 2031, outstripping the state average of 1.7% (Department of Transport, Planning and Local Infrastructure [DTPLI] 2014). In 2013, the population of inner Melbourne is projected to reach 718,600 with the addition of 268,100 people over the previous twenty years pushing population density up from 3350 per sq.km to 5344 per sq.km (ABS 2011, DTPLI 2014).

There is no agreement on whether the expansion of high-rise housing provision in inner Melbourne will attract families with young children, creating demand for the first stages of educational provision. Birrell and Healy (2013) point to limitations in the supply pipeline (dominated by small one and two bedroom dwellings), whereas the City of Melbourne (2014, p. 35) argues that investment in new inner urban schools may change the profile of housing demand. These projections have generated significant publicity and media commentary in relation to school provision (Topsfield 2014, Cook 2016).

Around half of Melbourne’s housing growth over the past decade has occurred in the outer urban growth areas, and an estimated 610,000 dwellings will be constructed in these areas by 2051 (Victorian Government 2014, p. 62). Concern has been expressed about a mismatch of physical planning and social planning, or the advance of developer-driven estate housing over the provision of social infrastructure and social programs in these areas (Growth Areas Social Planning Tool Project Group
There has been significant lobbying by outer urban LGAs and media publicity around existing educational provision and future school demand on Melbourne’s fringe (Forrest 2015). It is also projected that 650,000 new dwellings will be constructed in established middle-ring suburbs by 2051—around 8% more than in outer Melbourne and double the inner city projections (Victorian Government 2014, p. 62). There has been vocal public debate over schools, particularly high schools, in middle-ring suburbs, following school closures and subsequent local demographic change (Davies 2010). Here debates focus on the regeneration or reopening of schools, rather than initial provision.

5. Some Policy Challenges for Urban Schools

Educational planning and urban planning are future oriented. Schools have been famously defined as “four walls surrounding the future” (Barth 1990, p. 158), invoking a particular socio-spatial setting. Urban planning has been characteristically concerned with the spatial organisation of future growth. Recent planning literature asks critical questions about the growth dependence of liberal market economies (Rydin 2013). A more precise framing of our interest here, though, is the growth dynamics of cities and how educational planning authorities and schools engage with the changing urban contexts in which they operate. Working broadly off the challenges and principles enumerated in the table above, the following section discusses some key policy issues for urban schools, with particular reference to Melbourne.

5.1. Managing the Educational Demand Cycle

Land scarcity and associated revenue constraints have emerged as significant problems for the Victorian state department of education, only two decades after a round of school closures in inner Melbourne. At the time of writing, the department is seeking to acquire or re-purpose up to ten sites for schooling in inner Melbourne. The department has the third largest land portfolio of Victorian government instrumentalities, with estimated holdings of 2,363 hectares in 2011 (Victorian Environment Assessment Council (VEAC) 2011, p. 65). The portfolio is subject to a whole-of-government public land policy administered by the Victorian Department of Treasury and Finance (DTF), which requires departments and agencies to dispose of land that “no longer contributes to current or future service delivery needs” (DTF 2015).

Under this policy, land sales are intended to free up capital for social infrastructure projects such as “schools, hospitals and public transport” (DTF 2015). The policy sets down processes and criteria for identifying surplus public land, and sets annual revenue targets from its sale. Setting aside DTF’s conflicted position in both setting policy and performance targets, and conducting sales, VEAC (2011, p. 56) observes that DTF’s criteria for assessing public land values do not specifically canvass the future impact of urban densification. Incorporating this perspective would, in economic terms, involve placing greater weight on the option value of public land—that is, the value placed on preserving options for the future use of the land—than on realising its current market value.

Education authorities, like other public land managers, need to weigh up the opportunity cost of retaining underutilised or unsuitable land assets. However, does the current system prioritise disposal and distort decision-making in the absence of alternative policy mechanisms? Troy (1996) has been one of the few Australian voices arguing for policy settings, design input and institutional experimentation to manage educational demand cycles. At a conceptual level, the close coupling of education with compulsory-years schooling (rather than, for example, locating schooling on a spectrum of life-long learning) limits the planning imagination. There is a modest international literature on the re-use of urban land (for example Greenstein and Sungu-Eryilmaz 2004) and on the adaptive re-use of schools (for example Fox et al. 2012), but there is little published research specifically addressing the merits of disposing or retaining educational sites. A key research question here is the whether the sale of high-value educational land, where that land is used for housing developments, contributes to the
privatisation of education, through the contraction of local educational choice and the preferences of
the new high income households.

5.2. Coordinating Education, Transport and Housing Policy

A series of Melbourne planning strategies has advocated business, public service and housing develop-
objectives include containing urban growth, reducing car dependency, developing vibrant and equitable
urban precincts, and reducing the infrastructural, social and environmental costs of urban sprawl.
Recent Victorian government discussion papers have confirmed this policy direction through a plan-
ing vernacular of transport-oriented development (TOD), twenty-minute neighbourhoods and walk-

The failure of earlier plans to implement this vision has been attributed to deficiencies in their
original conception (Mees 2011), unprecedented population growth (Victorian Government 2014),
and the eclipse of spatial planning by major infrastructure developments as the strategic basis for
Australian metropolitan development (Dodson 2009).

There has been little specific attention to the relationship between schools and TOD, in Australia
or internationally (Bierbaum et al. 2010). Working within a new urbanist framework, Reid (2011)
has gestured to TOD principles in proposing the concept of school-oriented development (SOD). In
this setting, Reid advocates institutional co-location with different stages of schooling (for example,
community services or aged care facilities with primary schools; employment and cultural precincts
and secondary schools).

The centrality of transport and housing to the TOD development model is significant for schools.
Historical data show a steep increase in the use of private vehicles for school transport in Melbourne
in the late twentieth century, with an associated decline in “active” transport such as walking or cycling
by students (Curtis et al. 2015). Imaginative strategies such as walking school buses have emerged
in response to concerns over childhood obesity, neighbourhood walkability and safety. TOD prin-
ciples, though, have particular relevance for the siting of secondary schools, as secondary schools are
located at regional rather than neighbourhood scale, and secondary students generally travel further
and more independently than primary students. An efficient and safe public transport system may
foster school networks, curriculum choice and student mix by facilitating coordinated subject offer-
ings across schools. Victorian data also show there is greater community use of secondary school
facilities outside class time than their primary counterparts (Victorian Competition and Efficiency
Commission 2009). Good public transport and well-sited secondary schools may encourage such use,
while minimising car dependency.

Housing affordability impacts on educational provision by influencing the housing choices of the
educational workforce and the social mix of student populations. The Australian policy literature pays
some attention to the influence of social infrastructure provision on social mix (for example, Growth
Management Queensland 2010). The US literature goes further, with Bierbaum et al. (2010) urging that
new urban developments based on TOD or compact city principles specifically engage with questions
of housing affordability, to address problems related to attracting and retaining modestly remunerated
 teaching staff and with diversifying the social mix of school populations. The housing choices of key
public sector workers (including teachers) have come under recent scrutiny in Australia’s major cities
(Williams and Finney 2013, City of Melbourne 2014, City of Sydney 2014). Australian state education
authorities offer housing services and subsidies for teachers in regional and remote regions. Is there
a case for extending this system to urban settings?

With regard to the social mix of school populations. Melbourne’s outer urban councils have
expressed concern about the lack of household and generational diversity in new growth areas, driven
by the spatial patterns of affordable housing (Growth Areas Social Planning Tool Project Group 2014).
However, the stratification of school populations, along class and cultural lines, is evident across
Australian metropolitan regions, and encouraged by school choice policies. Without holding up local
schools up as paragons of everyday multiculturalism (the school experience of some minority students has surely been oppressive), Ho (2015, n.p.) makes a powerful point in arguing that student segregation entails “the loss of opportunities to experience the realities of cosmopolitan Australian society and a globalised world”.

The social mix of schools is an “enduring problem” (Thrupp 2006) in educational research, policy and practice, and fully exploring its complexities is beyond the scope of this paper (for further discussion see Posey-Maddox et al. 2014, Camina and Iannone 2013, West 2006). However, the positive correlation between levels of social equity and educational achievement (Organisation for Economic Cooperation and Development 2013b) indicates that it is a salient issue for twenty-first century planners.

5.3. Urban Environmental Sustainability

Climate change is one of the key challenges to urban sustainability in the twenty first century. Recent Melbourne-based research under the banner of the Smart Green Schools (SGS) project has given us a better understanding of relationships between space, pedagogy and environmental sustainability through the construct of “effective green learning environments” (Hes 2013). Such research is finding its way into specifications for the design and construction of new schools, along with the environmental objectives of whole-of-government procurement policies. For example, the Victorian government’s specifications for new schools constructed under public-private partnership (PPP) arrangements (now the preferred procurement mode for Victorian government school facilities) includes ecological sustainability and responsibility as a project objective, to be realised through a range of design and management strategies (Department of Education and Early Childhood Development 2009). State educational jurisdictions have indicated an interest in formally benchmarking school environmental performance against international standards such as ISO 14,001 - Environmental Management Systems (Queensland Sustainable Schools 2015). The detailed specification of environmental performance criteria and reporting mechanisms in Victorian PPP contracts provides a good opportunity to gather further data on the environmental impact of schools, and inform future policy in this area.

The PPP contract’s attention to the resource consumption of school facilities is one side of the environmental ledger. The flipside is the contribution that schools can make as environmental assets. As Hes (2013:169) comments

[a] sustainable school is one that adds energy to the electricity grid, collects more water than it needs, is an effective and healthy learning space for its teachers and students, and is a learning tool.

Indeed, there are some notable examples of schools taking direct action on human-induced climate change, such as South Fremantle Senior High School achieving an Australia-first status as a carbon-neutral school (South Fremantle Senior High School 2015).

Looking beyond the school fence, local environmental partnerships are an important interface between schools, LGAs and communities. SGS’ concept of the school site as a learning tool is usefully extended to encompass the local eco-region. Formal programmes sponsoring environmental partnerships include the Australian Sustainable Schools Initiative (Australian Government Department of the Environment 2015), and more local initiatives, such as that administered by the Local Government Association of South Australia (2015). This record of cooperation bodes well for future demands on schools around environmental sustainability, and for their participation in measures for climate change mitigation and adaptation. With intensifying urban development, and added demand on environmental resources, there is likely to be increasing pressure on schools to act as good environmental citizens. In this scenario, school environmental policies and practices may become increasingly formalised and accountable, and also harmonised with other local institutions. There is growing policy interest amongst local jurisdictions—in Australia and internationally—in issues of climate change and community resilience, for planning and pragmatic reasons (local authorities are significant actors in emergency recovery). Urban governments are playing an increasingly important and evolving role in
what is now broadly conceptualised as climate change governance (McGuirk et al. 2014). The extent to which the educational role and institutional assets of schools (for example, using their physical assets for shelter, or using their communication assets) contribute to climate change governance is an area that would benefit from further empirical investigation and policy development.

5.4. Connecting Schools with Urban Digital Networks

In recent years, Australian schools, like cities, have been transformed by broadband and wireless communication technologies. Broad-scale technological developments (for example, devices such as notebook computers and mobile phones), digital infrastructure investment such as the Victorian government’s VicSmart fibre network connecting all Victorian schools, and specific policies such as the Digital Education Revolution program’s provision of wi-fi enabled notebooks (Commonwealth of Australia 2009), have transformed teaching, learning and classroom design.

Beyond the school fence, Australia is seeing escalating local government investment in public wi-fi networks and low power wide area networks supporting the “internet of things” as basic forms of urban infrastructure. The increasing use of wireless connectivity and the internet across domains of governance, education, leisure and commerce is also placing pressure on public institutions to provide internet access as part of their core business. Libraries, of course, have long been active in this area, and more than 70% of Australian local public libraries provide free public wi-fi (Australian Library and Information Association 2013). However, the hopes of internet scholars such as Benkler (2002) for schools to be nodes in local public networks have failed to emerge—in part due to risk-averse policy settings in the education sector. Ironically, as the school fences go down, and boundaries between schools and their surrounding communities become more porous, perceived online risks have raised new electronic barriers. For example, while all public library users share physical space, in Australia’s increasing number of shared school-public libraries, different internet access protocols between public library and education systems have typically led to the deployment of separate networks, or to school-driven restrictions on public library networks (Australian Library and Information Association 2013).

As the social and economic implications of digital disadvantage are increasingly apparent, we are seeing advocacy to expand “extended school” programs to encompass digital literacy skills through “dual-generational” learning (The Smith Family 2010). However valuable such programs may be, the contradictions between opening up the school for such purposes, and school-driven restrictions on a public internet resource (in dual libraries) suggests that integrated planning at a conceptual and practical level in this field has some way to go. Lowering the electronic fences of schools and sharing resources can make important contributions to community ICT access and capability. With internet penetration increasing across the globe, recent scholarship questions the validity of a binary “digital divide” separating those with access and those without. In addition to differences in internet skills, the sustainability of internet connections has emerged as a significant problem for low-income groups. Gonzales (Gonzales 2016) draws on technology maintenance theory to describe the practices and strategies that many people with low incomes engage in to negotiate temporary service disconnections, broken hardware and public network access limitations. Schools can play an important role in digital access and sustainability through boosting network resources, leveraging partnerships to acquire and share high-value equipment such as 3D printers, and using their teaching resources to enhance community ICT knowledge.

Extending mobile wireless connectivity may also facilitate learning and student engagement with urban environments. Students have been largely missing from the discussion to this point, underscoring the point that policy is customarily done to students, rather than done with them (Ball et al. 2012). There are good examples of how to involve students in urban research and urban governance, such as the Y-Plan programme directed by the University of California’s Center for Cities and Schools (2015). The location of schools in urban environments presents considerable learning opportunities to integrate the city as a text in curricula. The rapid uptake of mobile internet-enabled devices and increasingly ubiquitous access to public wi-fi enhances the viability of such initiatives.
6. Conclusion

International research suggests that demographic change and intensification of established urban areas is making decision-making about the provision and use of school facilities increasingly complex and contested (Hyra 2014). Recent Victorian education policy has prioritised a strategy of opening up schools for extended or shared use. The numerical dominance of primary schools, and a policy focus on early childhood (reflected in the 2006 transformation of the Department of Education and Training to the Department of Education and Early Childhood Development) has influenced the spatial and institutional coordinates of this policy. The “community hub” rhetoric is operationalised in several ways, as a locus for building parent-school partnerships, through to the use of school sites to co-locate early childhood facilities and community services. This in turn has involved complex cross-jurisdictional and cross-portfolio negotiations (local authorities, in association with state health and human service departments, have traditionally oversighted the early childhood sphere), with issues such as risk, resourcing and service coordination at front of mind.

Critical analysts have labelled the extension of state education department interests in early childhood and community services a process of “educationalisation” (Smeyers and Depaepe 2009). This seems a harsh assessment, given the well-documented benefits of good policy design and investment in early years settings.

However, in Victoria, we see glimpses of the “urbanisation” of education. Discussion of urban schooling has emanated from the Victorian government planning authorities, rather than the state department of education. The current challenge to build schools to cater for Melbourne’s educational demand, though, is being approached from a Treasury-driven procurement perspective, through the use of PPP vehicle. While this policy encourages innovation in school design and delivery, some wider structural issues sketched out in this article receive little attention.

This article has sought to encourage a conversation between planning and learning by identifying four challenges for the provision of schools and schooling in the context of urban growth and intensification. However, in reframing the concept of an urban school, we reinforce that concept’s original concern with educational disadvantage and its association with uneven patterns of urban development.

Urban schooling, as we have outlined it in this paper, requires the sustained engagement with the surrounding community and urban region. We argue that school provision in inner city areas experiencing demographic change brings particular challenges and may require experimental approaches with physical settings and institutional links. Such an approach would be consistent with the long tradition of innovation in teaching, curricula and learning technologies.

Disclosure statement

No potential conflict of interest was reported by the authors.

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