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Schools as Community Hubs International Conference 2020

Proceedings

Building Connections for Community Benefit



SCHOOLS AS COMMUNITY HUBS

Building Connections
Schools as Community Hubs

SCHOOLS AS COMMUNITY HUBS INTERNATIONAL CONFERENCE 2020

Building Connections for Community Benefit

Cleveland, B., Chandler, P., Backhouse, S., Clinton, J., McShane, I., & Newton, C. (Eds.). (2020). *Building Connections for Community Benefit.* Proceedings of Schools as Community Hubs International Conference 2020. https://doi.org.10.26188/13146527

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Cover photo: Bridgewood Primary School, Victoria, Australia.
Architecture by Clarke Hopkins Clarke. Photo by Rhiannon Slatter.







SCHOOLS AS COMMUNITY HUBS

BUILDING CONNECTIONS FOR COMMUNITY BENEFIT

SCHOOLS AS COMMUNITY HUBS INTERNATIONAL CONFERENCE 2020

Building Connections for Community Benefit.

An international conference for academics and practitioners.

Edited by Dr Benjamin Cleveland, Dr Philippa Chandler, Sarah Backhouse, Professor Janet Clinton, Associate Professor Ian McShane and Associate Professor Clare Newton.



THIS PUBLICATION

Conference papers were subject to double-blind peer-review in line with HERDC specifications.

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The views expressed herein are those of the authors and are not necessarily those of the Australian Research Council.

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We would like to extend our special thanks to Phuong Nguyen for her valued contributions to delivery of the Schools as Community Hubs International Conference.

The project also acknowledges the ongoing support and engagement of its Partner Organisations, without whom the *Building Connections: Schools as Community Hubs* research would not be possible.

PREFACE

Schools as Community Hubs International Conference 2020 was a multi-disciplinary event held online on 3 and 4 December 2020. It explored the development of schools as community hubs with an emphasis on the role of the built environment (social infrastructure) in supporting such activity. The event was facilitated by the *Building Connections: Schools as Community Hubs* research team based at The University of Melbourne, Australia.

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We would like to acknowledge the Traditional Owners of the lands on which this online conference is being hosted, as well as the Traditional Owners of the land delegates are situated on and acknowledge that Indigenous Australians have been custodians of the lands and waterways of Australia for thousands of years. We pay our respects to their Elders, past, present and emerging.

ABOUT THE *BUILDING CONNECTIONS: SCHOOLS AS COMMUNITY HUBS* ARC LINKAGE PROJECT

Building Connections is investigating how best to plan, design, govern and manage schools to operate successfully as 'more than a school', encouraging the development of resilient and connected communities.

Schools are some of the most underutilised assets in Australia. Many are used sparingly outside of school hours. Furthermore, the co-location of school infrastructure with other forms of social infrastructure, such as sporting, recreation and health services facilities, is not as common as might be expected. Nevertheless, school sites are increasingly being recognised as valuable assets that can support the education, health and wellbeing of individuals, families and community groups – especially in rapidly growing areas of Australia's largest cities and regional centres.

In the next decade, Australia will need up to 700 new schools to meet the demands of a growing population. This presents a significant opportunity to embed new knowledge about the role that indoor and outdoor spaces can play in developing and supporting communities across the country. The project aims to inform decision making about how new and existing school infrastructure can be used for broader community benefit. Building Connections commenced in June 2019 and will run until mid-2022.

The primary output of the research will be the *Building Connections: Schools as Community Hubs Development Framework*. This will provide policy guidance to help state governments, non-government school systems, local councils, schools and community organisations overcome the obstacles that commonly limit the use of school facilities for broader community benefit. The Framework aims to provide evidence-based advice on school infrastructure provision and management, with a focus on programs and services that may be offered in addition to formal schooling.

Building Connections is being undertaken collaboratively with the following Partner Organisations (in alphabetical order):

- Brand Architects
- Catholic Education Diocese of Parramatta
- Clarke Hopkins Clarke Architects
- Department for Education, South Australia
- Department of State Development, Infrastructure, Local Government and Planning, Queensland Treasury.

The project has been funded by the Australian Government through the Australian Research Council (ARC) Linkage Projects scheme. This promotes national and international collaboration between higher education institutions, government, business, industry and end-users. Research and development focusses on applying specialist knowledge to 'real world' problems to generate relevant and timely insights. Building Connections will contribute in significant and substantial ways to this overarching objective.

The Building Connections project is hosted by the Learning Environments Applied Research Network (LEaRN) based at The University of Melbourne, Australia.

CONTENTS

Foreword	Benjamin Cleveland	11
Keynote	Lee Callum	14
PART 1 Schools at the Heart of Urban Development	School-Centered Neighborhood Revitalisation in Baltimore Ariel H. Bierbaum, Alisha Butler and Erin O'Keefe	17
	Vertical Schools as Community Hubs Tony Matthews, Clare Newton, Mirko Guaralda and Severine Mayere	28
	Outside the Classroom: Spatial Considerations to Facilitate Community Relationships with Schools Benjamin Coulston	41
	Vertical Schools as Community Hubs in Residential Neighbourhoods Fatemeh Aminpour	49
PART 2 Connecting with the Early Years	Calvary Community Hub: Concept Designs in Response to the Needs of a Thriving Community Hub Angela K. Branford and Peter E. Moeck	66
	The Family Zone: A School-based, Multi-partnership Approach to Child and Family Wellbeing Leigh Goodenough and Kathlene Wilson	75
	Our Place: Opening the School Gates to the Community Alexandra Fraser and Margaret Rutherford	82
PART 3 Partnering for Better Community Outcomes	The 21st Century Learning Hub: Lessons from a Joint Use School and Community Library Project in Regional Australia David Tordoff and Julia Atkin	93
	Antecedents of Schools as Community Hubs: The Lasting Influence of John Dewey's Philosophy Cynthia Hron	111
	Integration of Schools and Community Infrastructure: A Network Analysis Natalie Miles	121
	Rear Vision: Lessons from Community Education in the '80's - Melbourne, Australia and Michigan, USA Martin Brennan	129
PART 4 Enabling Community Hubs	Researching Policy Settings for Schools as Community Hubs Robert Polglase	137
	Understanding the Development and Implementation of Schools as Community Hubs: A Case Study Approach Carolina Rivera-Yevenes	145
	Making it work: Makerspaces, Maker Community and High School Partnerships Linus Tan, Ravi Bessabava and Kristen Hebden	154
Closing Panel	Simon Le Nepveu, Paul Meldrum, Laurence Robinson, Lee Sansom, Shirley Watters, Janet Clinton, Ian McShane, Clare Newton, Benjamin Cleveland	165
Biographies	In order of papers	168



Bridgewood Primary School, Victoria.
Architecture by Clarke Hopkins Clarke.
Photo by Rhiannon Slatter.

FOREWORD

BUILDING CONNECTIONS FOR COMMUNITY BENEFIT

BUILDING CONNECTIONS FOR COMMUNITY BENEFIT

Benjamin Cleveland

The University of Melbourne

Foreword

The relations between schools and communities has been a topic of debate, research and development for decades. Recognition that schools play a central role in the lives of young people, families and carers is well-appreciated – perhaps more so now than ever before in light of the COVID-19 pandemic and the impact of temporary school closures in many parts of the world. Yet, history suggests that generating and sustaining 'more than a school' operations, including links to early years, health and wellbeing services, plus other community-oriented partnerships, can be complicated and challenging.

The Schools as Community Hubs International Conference brings together university-based researchers and industry practitioners in an academic forum to discuss the contemporary opportunities and difficulties associated with bringing schools and communities closer together. Following a call for abstracts, 14 papers were selected via a blind peer review process to be presented at the conference. These have been clustered into four groups:

- Schools at the Heart of Urban Development
- Connecting with the Early Years
- Partnering for Better Community Outcomes
- Enabling Community Hubs

These groups represent the common themes addressed in the submitted papers, offering high-level insight into the pressing issues currently being explored and developed in research and in practice.

The conference theme, *Building Connections for Community Benefit*, highlights the conference papers' authors' perspective that connections, partnerships and shared enterprises – both formal and informal – involving schools, government, industry and/or community groups can generate significant

benefits for all involved. The conference theme also highlights the importance of building facilities to accommodate the activities that generate the benefits described. Here, community hub initiatives and activities become entangled with issues related to urban planning, architectural design, governance, facility management, and of course funding.

As cities and regional areas around the world intensify and societal dynamics change, pressure on schools to become 'more than a school' appears to be increasing. The Schools as Community Hubs International Conference will explore the expanded roles of schools, investigating how schools may offer more to their communities – historically, currently, and into the future.

On behalf of the *Building Connections: Schools as Community Hubs ARC Linkage* project team and partners, the conference hosts, I hope all attending (and those reading these proceedings later) enjoy the insights and perspectives shared, engage enthusiastically with the discussions, and are fortunate to meet new peers with whom to further engage in the years ahead.

Welcome.



Yarrabilba Family and Community Place.
Photo by Community Hubs and Partnerships (CHaPs), Queensland Treasury, Queensland Government.

KEYNOTE

REFLECTIVE PROVOCATION: LEE CALLUM

Calling on a career in education that began in a one-teacher rural school, included acting as Principal of a rapidly growing regional high school and working in Executive Director roles within the Queensland State Government to champion the development of schools as community hubs, Lee Callum will explore the recent history of school-community relations and challenge delegates to consider 'what next'?



Santa Sophia Catholic College, Box Hill, NSW.
2,000+ Preschool-to-Post School Learning Community.
Due for occupancy late 2021.
Learning Design by Catholic Education Diocese of Parramatta.
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PART 1

SCHOOLS AT THE HEART OF URBAN DEVELOPMENT

https://doi.org/10.26188/13289630

SCHOOL-CENTERED NEIGHBORHOOD REVITALIZATION IN BALTIMORE

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This paper retains the authors' use of American English.

Abstract

Despite the ways that schools are deeply tied to local conditions, we know less about how school change interacts with neighborhood change. This study asks: How does a major investment in school facilities materially affect lived experiences in neighborhoods? Using a case study approach, we present findings from a study of the policy apparatuses and impacts of Baltimore's school closures, rehabilitation, and construction vis-à-vis patterns of uneven urban development and change in three Baltimore neighborhoods that have each seen new school construction as part of the 21st Century Schools Buildings Plan (21CSBP): a cross-agency investment of nearly US $1.1 billion to build or renovate 28 public schools in some of Baltimore's most neglected neighborhoods. We argue that different agency stakeholders articulate competing operational theories of community development, which hinders collaborative efforts and creates obstacles to realizing deep impact of these school facilities investments on neighborhood outcomes.

Keywords: community development, public education, school facilities, neighborhood change

School-Centered Neighborhood Revitalization in Baltimore

The 21st Century Schools Buildings Program (21CSBP) was an unprecedented state and local investment to Baltimore City's public schools' infrastructure. The State of Maryland's 2013 Baltimore City Public Schools Construction and Revitalization Act authorized the Maryland Stadium Authority (MSA) to leverage $60 million into bond money, providing $1.1 billion in funding to support the renovation and/or replacement of 28 Baltimore City schools in 25 neighborhoods. The Act authorized the collaboration of the City of Baltimore (the City), Baltimore City Public School System (BCPSS), the Maryland Interagency Committee on School Construction (IAC), and the MSA to:

> Design schools that allow for recreational opportunities for the community, combined with other cooperative uses and school partnership programs… [and] be good stewards of Maryland taxpayer dollars and champions for education, economic development and neighborhood revitalization in the City of Baltimore (Maryland Stadium Authority, n.d.).

Other key partners included the Baltimore City Department of Recreation and Parks (BCRP) and the Department of Planning (Planning), city-wide non-profit organizations, and philanthropy.

Baltimore is a majority Black city, where the legacy of racist housing and education policies and structural inequities have limited largely Black residents' opportunities and laid the groundwork for the city's current hyper-segregation (Baum, 2010; MacGillis, 2016; Rothstein, 2015; Theodos et al., 2019). In 2019, Baltimore's population stood at 593,490, a 4.4 percent decrease from the 2010 Census (U.S. Census Bureau, n.d.). BCPSS is experiencing steady declines in enrolment across schools (National Center for Education Statistics, n.d.). Today, BCPSS serves 79,187 PreK-12 students, the majority of whom are Black (76 percent) and half of whom are from economically disadvantaged households (Baltimore City Public Schools System, 2020). Recently, BCPSS has closed and merged schools to manage declining enrolment and underutilized school buildings. The 21CSBP initiative is notable not only for its expansive vision of school buildings in communities and the significant level of public investment, but also because of the coupling of mass closures and school construction in BCPSS's school facilities management plan (Baltimore City Public Schools, 2018).

Introduction

This study situates 21CSBP and other school facilities management decisions in light of more traditional efforts in place- and people-based community development efforts. We focus on meso-level community development actors (city agencies and the school district) and their roles in facilitating community development activity in neighborhoods.

City agencies responsible for planning, housing and community development, and parks and recreation have obvious involvement in community development activities. But what happens when a school district enters the fray of neighborhood change through significant investment in school facilities

and an aggressive vision for community schools? What are the possibilities and the pitfalls of cross-sector collaborative governance for school and neighborhood change? How does this effort challenge and extend our understanding of both community schools and community development?

What is community development and where do schools fit?

Community development is the process of place- and people-based initiatives that aim to provide resources to economically disadvantaged and disinvested communities (Wolf-Powers, 2014). Place-based community development strategies expand affordable housing, create business improvement districts, and establish community land trusts. People-based strategies focus on improvements to the built and natural environments and connections to social services, housing opportunities, jobs, and increasing engagement in political processes with the goal to improve residents' lives.

Although schools are a vital component of community development efforts (Good, 2019; Patterson & Silverman, 2013; Taylor et al., 2013), school and neighborhood improvement have been viewed as distinct processes. School districts implicitly enter the realm of planning and community development when they make decisions about school facilities, including the closure of school buildings (Bierbaum, 2018). Additionally, schools are sites of social capital and leverage community development efforts to increase civic participation and build community ties (Brownlow, 2013; Joseph & Feldman, 2009; Nast & Blokland, 2013; Warren, 2013). Schools and school improvement may also catalyze economic growth and stabilize and/or enhance local housing markets (Horn, 2015; Steif, 2015).

Studies of school closures have underscored the influence of schools on communities, particularly communities of color, disproportionately negatively affected by closures (de la Torre & Gwynne, 2009; Good, 2016; Green, 2017; Kirshner et al., 2010; Research for Action, 2013; Sunderman et al., 2017; Weber et al., 2016). These communities' resistance to closures emphasizes how schools are experienced and understood as core neighborhood public infrastructure and linked to legacies of racial oppression and continued disinvestment of particular Black neighborhoods, even while school district management does not necessarily consider these metrics (Bierbaum, 2018; Ewing, 2018; Good, 2017, 2019; Green, 2017; Nuamah, 2020).

Methods and Data

We used Wolf-Powers' (2014) framework for community development's theories of action and, based on prior research that establishes schools and education as important to a lot of local level community development practice, extended it to incorporate the role of schools (Table 1). Our usage is described in the Findings section.

Table 1

Theories underlying U.S. community development and the role of schools (adapted from Wolf-Powers 2014)

	Diagnosis	Theory of action	Tools	Roles of Schools
Norms	Disorganisation Lack of social control	Social capital-building Better coordination Comprehensivity	Comprehensive community initiatives	Schools as service providers and community 'hubs'
Markets	Lack of functional market institutions for physical and human investments	Activation of markets	Poverty de-concentration Market-building Choice (vouchers)	Schools as neighborhood amenities
Justice	Lack of access to power Historic exclusion and exploitation Inequity of metro resources	Community control Intermediaries to government Redistribution of wealth and opportunity	Indigenous leadership development Political organizing Alternative institutions	Schools as catalysts for community organizing and parent leadership

Norm-centered theories of action focus on building social capital, including community trust, and the coordination of social services. Market-centered theories of action purport that a lack of public and private capital investment is the driver of neighborhood disadvantage. Justice-centered theories of action identify structural inequity as the root cause of neighborhood disadvantage, and consequently argue for more political and structural interventions. This framework, with the addition of the role of schools in each theory of action, helps us make sense of 21CSBP's impact on the social fabric, economic growth and stability, and power/justice within communities.

This study situated the 21CSBP schools and their promise as community schools in light of more traditional efforts in place- and people-based community development efforts. The Maryland Philanthropy Network (MPN) funded our research team to conduct an initial analysis of 21CSBP. Between fall 2018 and spring 2020, we conducted a review of documents, participant observation, and 42 semi-structured interviews (Table 2).

We analyzed these data using inductive and deductive coding schemes. Throughout the data collection and analysis phases, our team met to debrief and discuss emerging themes. We delivered memos to MPN staff and presented emerging findings to key stakeholders to ground-truth our analysis iteratively.

Table 2

Interview Respondents

Role	Number
Community-based organization staff	6
Community school coordinator	2
Community-based leader and/or organizer	2
City agency staff	15
School district staff	8
State agency staff	2
Philanthropic partner	5
Other	2

Findings

We found that the inclusion of school districts complicates the implementation of community development efforts by requiring cross-sector collaboration in policy making and practice. Ambiguous legislative directives, hierarchies, and limited integration among multiple agency partners can challenge implementation and cause disruption, competition, and/or conflict with their existing priorities and processes.

The 21CBP policy design process engaged diverse coalitions of advocates, community-based organizations, and local and state governmental actors. A coalition (Transform Baltimore: Build Schools. Build Neighborhoods.) formed in 2010 and worked for three years to identify innovative solutions to publicly finance capital improvements to city school buildings. Philanthropy provided funds for high-capacity community-based organizations to educate and mobilize neighborhood associations and residents in support of proposals to fully renovate and modernize all public school buildings in Baltimore City. Grassroots organizing efforts gave way to city and state policy action. Advocacy was grounded in the belief that new and renovated schools had the power to transform learning and neighborhoods, and in 2013, the Maryland General Assembly passed the 21st Century School Buildings legislation.

The stakeholders engaged in policy design were absent from the implementation process. Transform Baltimore advocates who designed 21CSBP and legislators who crafted its final parameters receded once the legislation passed. Responsibilities were transferred to the partners named in the bill: MSA, IAC, BCPSS, and the city (through its departments of Planning and BCRP), without the benefit of advocates' relationships and deep local knowledge.

Ambiguous directives, legacies of mistrust, and limited resources challenged cross-sector collaboration. In one implementing agency director's words, "Once [the legislation] passed, it

was overwhelming". This was the first time some agencies involved in implementation had worked together or considered school construction a priority. Ambiguous legislative directives allowed discretion in how to administer the program, causing confusion, competition, and conflict among implementers. The urgency to begin construction prevented the possibility of a slow, structured implementation process. Partnering agencies shared little trust, culture for collaborative governance, understanding of decision-making rules of implementing agencies, hierarchical integration within and among implementing agencies, language or values, and few metrics of success. The spirit of collaboration and transformative investment embodied in the legislation was "often sidetracked by turf battles and micro-legal battles", especially around shared community use of facilities.

Divergent and often competing theories of action undergirded the disconnections between implementing agencies. MSA, the financing arm of 21CSBP, managed from an operating philosophy of buildings on time and under budget. Their approach and metrics of success focused on cost effectiveness and efficiencies of scale.

BCPSS managed from a philosophy of schools for our kids. They saw 21CSBP decisions as a way to meet BCPSS's commitment to racial justice and equitable education, prioritizing sites with the most need and that had been the most historically disadvantaged, and as a non-negotiable element of their planning. They did not consider neighborhood condition, other agencies' strategies, or broader market conditions when making their selections. 21CSBP schools were solely about improving equity for BCPSS students.

The City, through Planning and BCRP, prioritized community use of schools and approached 21CSBP efforts from a philosophy of schools for our neighborhoods and their residents. Planning staff promoted planning schools into already existing neighborhood plans (i.e., integrating 21CSBP designs into neighborhood traffic plans), rather than designing schools independently and addressing links to the neighborhood through a secondary design process. To that end, Planning staff facilitated neighborhood planning processes for the quarter-mile radius area surrounding each school and helped implement community improvement and beautification projects. The Department of Housing and Community Development (HCD) staff suggested that 21CSBP school siting decisions were not part of broader citywide development discussions and as a result, site selection sometimes missed the mark. BCPSS's decisions to place many 21CSBP schools in deeply distressed communities limited how they and other community development actors could leverage school investments with market forces to support neighborhood stability and growth.

The competing theories of action described above also lead to an emphasis on quantitative measures of success. These metrics are not unusual in community development efforts that focus on economic development, housing markets, and household stability (Baum, 2001; Galster et

al., 2004; Rosenblatt & DeLuca, 2017). They are also common in school facilities and school construction programs, which consider student achievement, faculty or student absenteeism, or health outcomes (Neilson & Zimmerman, 2014). But less easily measured factors such as the experience in and of these new schools is central also mattered.

A photograph taken at the opening of a new 21CSBP school shows a third-grade student with a huge gaping smile on his face. "This. Happy children. The awe," a BCPSS staff member said in answer to a question about metrics for success. Her colleague added, "They're awestruck...the little ones ask, 'Is this for me?'" (personal interview, school district, February 13, 2019). Others echo these emotional responses, and call for joy, awe, and connection as measures of success. One philanthropic leader commented, "We can put up all the new buildings you want, but you have to change something within people. They have to feel hopeful; they have to feel that they are valued" (personal interview, foundation, January 15, 2019). Likewise, improvements to neighborhood social and organizational connections and local pride were also desired outcomes of 21CSBP.

The disjointed nature of the implementation process at the meso-level of city public agencies results in a disjointed set of outcomes at the local, neighborhood level. Certainly, many of these communities have seen improvements such as parks, murals, and streetscape improvements, largely driven by the Planning Department's efforts and small capital investments. However, beyond these wins, systemic infrastructure for residents and neighborhoods remained ad hoc and highly uneven across the city.

Discussion

Baltimore's 21CSBP is an unprecedented investment, yet the material outcomes fell short of a transformed model of community development implicitly embedded in the 21CSBP legislative mandate. Deep-seated history of mistrust and the challenges of cross-sector collaboration challenged public agencies. In Baltimore, these challenges overwhelmed agencies' ability to work as collective stewards of a shared social agenda for school and neighborhood change through this massive school facilities investment.

This case affirms the ways that divergent theories of action can yield disjointed outcomes on the ground, as Wolf-Powers (2014) suggested. Following a theory of action for "restoration of norms", city agencies and philanthropic partners approached 21CSBP as one community development investment among many others that could help achieve comprehensive interventions, better coordination across sectors, and enhanced social capital through public engagement and community implementation. HCD strongly articulated an interest in "restoration of markets", explicitly questioning BCPSS's siting decisions and lamenting how 21CSBP investments in weak markets wasted the possibility of leveraging additional community development resources.

BCPSS staunchly defends their 21CSBP siting decisions, reflecting a commitment to a "restoration of justice". As a meso-level public agency, they are not calling for Indigenous leadership or political organizing (as in Wolf-Powers' original framework). Staff explicitly and passionately grounded their plans for the 21CSBP schools in the redistribution of resources and their commitment to students who historically have been the most disadvantaged by BCPSS and other public agencies.

While implicit in "equity" work across the city, BCPSS staff were the only respondents who consistently named and challenged Baltimore's racist history in public education and neighborhood planning and situated 21CSBP planning and implementation in this context. This framing and the current Black Lives Matter movement motivate questions about the deeper underlying infrastructure of legislative and budgetary systems that crafted and executed 21CSBP. The following questions arose: How have generations of racist perceptions of Baltimore's public school children and families shaped the ways that policies, budgets, and relationships are structured, and therefore constrain present-day efforts at cross-sector collaboration? How have decades of state-control of BCPSS and its operations likewise impacted this collaboration?

Placing schools in a framework of community development expands our understanding of "community schools". It suggests that beyond serving as a hub for bringing services into the school, the school building is situated in an ecosystem of a broader neighborhood that extends out from the school's walls. This understanding is especially acute amid the current COVID-19 crisis which lays bare the extent to which schools serve a critical role in the delivery of our social safety net. The void that closures have created is a testament to the reach, power, and efficacy of the community school approach. Community school coordinators and family engagement specialists employed by BCPSS and non-profit community-based organizations became a literal lifeline for so many families in the midst of this crisis. But community school coordinators arguably had more impact when their work was linked to other community development activities.

Although the community school model holds great promise, an extreme event like COVID-19 revealed some of the pitfalls that need further consideration and raised critical questions about what schools should or should not have to take on. For example: How can we extend the community schools' model of bringing services for students and their families into the school building to create a more porous boundary between the school and the neighborhood, linking students, families, and other community members to public libraries, health clinics, community gardens, recreation sites, and other community-based assets? How does this alternative model shift the onus of intervention to other public and non-profit organizations?

Conclusion

These questions, and more, reveal the gaps in community development practice and the limitations of schools filling those holes. The fabric supporting students, families, and other neighborhood residents is patchy. Our findings underscore the need for a re-examination of who plays a role in community development to include school districts as core meso-level actors and school sites as central neighborhood-level institutions woven into the fabric of more traditional community development activity. Meso-level actors' horizontal integration can support more seamless and effective cross-sector collaboration in design and implementation. Further, "vertical" integration should bridge the activities and wisdom of grassroots community-based organizations, school site leadership, and students and families with the policy structures and resources of meso-level public agencies.

References

Baltimore City Public Schools. (2018). *SY1718 Baltimore City Public Schools Comprehensive Educational Facilities Master Plan*. Baltimore City Public School System. https://www.baltimorecityschools.org/sites/default/files/2019-01/CEFMP-2018.pdf

Baltimore City Public Schools System. (2020). *District Overview*. https://www.baltimorecityschools.org/district-overview

Baum, H. S. (2001). *How Should We Evaluate Community Initiatives?* Journal of the American Planning Association, 67(2), 147–158. https://doi.org/10.1080/01944360108976225

Baum, H. S. (2010). *Brown in Baltimore: School Desegregation and the Limits of Liberalism*. Cornell University Press.

Bierbaum, A. H. (2018). *School closures and the contested unmaking of Philadelphia's neighborhoods*. Journal of Planning Education and Research. https://doi.org/10.1177/0739456X18785018

Brownlow, G. (2013). *Building schools and community connections: Outreach and activism for new schools in southeast Los Angeles*. In K. L. Patterson & R. M. Silverman, (Eds.), Schools and urban revitalization: Rethinking institutions and community development (pp. 185–203). Routledge.

de la Torre, M., & Gwynne, J. (2009). *When Schools Close: Effects on Displaced Students in Chicago Public Schools* (ISBN-978-0-9814604-8-2). Consortium on Chicago School Research.

Ewing, E. (2018). *Ghosts in the schoolyard: Racism and school closings on Chicago's south side*. University of Chicago Press.

Galster, G., Walker, C., Hayes, C., Boxall, P., & Johnson, J. (2004). *Measuring the impact of community development block grant spending on urban neighborhoods*. Housing Policy Debate, 15(4), 903–934. https://doi.org/10.1080/10511482.2004.9521526

Good, R. M. (2016). *Histories That Root Us: Neighborhood, Place, and the Protest of School Closures in Philadelphia*. Urban Geography, 1–23. https://doi.org/10.1080/02723638.2016.1182286

Good, R. M. (2017). Invoking landscapes of spatialized inequality: Race, class, and place in Philadelphia's school closure debate. Journal of Urban Affairs, 39(3), 358–380. https://doi.org/10.1080/07352166.2016.1245069

Good, R. M. (2019). *Neighborhood Schools and Community Development: Revealing the Intersections through the Philadelphia School Closure Debate*. Journal of Planning Education and Research, https://doi.org/10.1177/0739456X19839769

Green, T. (2017). *"We Felt They Took the Heart Out of the Community": Examining a Community-Based Response to Urban School Closure*. Education Policy Analysis Archives, 25(0), 21. https://doi.org/10.14507/epaa.25.2549

Horn, K. M. (2015). *Can Improvements in Schools Spur Neighborhood Revitalization? Evidence from Building Investments*. Regional Science and Urban Economics, 52, 108–118.

Joseph, M., & Feldman, J. (2009). *Creating and Sustaining Successful Mixed-Income Communities Conceptualizing the Role of Schools*. Education and Urban Society, 41(6), 623–652.

Kirshner, B., Gaertner, M., & Pozzoboni, K. (2010). *Tracing Transitions The Effect of High School Closure on Displaced Students*. Educational Evaluation and Policy Analysis, 32(3), 407–429. http://dx.doi.org/10.3102/0162373710376823

MacGillis, A. (2016). *The Third Rail*. Places Journal. https://doi.org/10.22269/160321

Maryland Stadium Authority. (n.d.). *21st Century School Buildings Program*. Retrieved September 21, 2018, from https://www.mdstad.com/21st-century-schools

Nast, J., & Blokland, T. (2013). *Social Mix Revisited: Neighbourhood Institutions as Setting for Boundary Work and Social Capital*. Sociology, 1–18.

National Center for Education Statistics. (n.d.). *Elementary and Secondary Information System*. https://nces.ed.gov/ccd/elsi/

Neilson, C. A., & Zimmerman, S. D. (2014). *The effect of school construction on test scores, school enrolment, and home prices*. Journal of Public Economics, 120, 18–31. https://doi.org/10.1016/j.jpubeco.2014.08.002

Nuamah, S. (2020). *"Every year they ignore us": Public school closures and public trust.* Politics, Groups, and Identities. 10.1080/21565503.2020.1748063

Patterson, K. L., & Silverman, R. M. (Eds.). (2013). Institutions and the new normal for community development. In *Schools and urban revitalization: Rethinking institutions and community development* (pp. 3–13). Routledge.

Research for Action. (2013). *School Closings Policy [Issue Brief].* Pennsylvania Clearinghouse for Education Research (PACER).

Rosenblatt, P., & DeLuca, S. (2017). *What Happened in Sandtown-Winchester? Understanding the Impacts of a Comprehensive Community Initiative.* Urban Affairs Review, 53(3), 463–494. https://doi.org/10.1177/1078087415617852

Rothstein, R. (2015). *From Ferguson to Baltimore: The fruits of government-sponsored segregation*. LSE Blogs. http://blogs.lse.ac.uk/usappblog/2015/04/30/from-ferguson-to-baltimore-the-fruits-of-government-sponsored-segregation/

Steif, K. (2015). *Toward School Improvement Districts: School Quality and the Equitable Revitalization of Neighborhoods* [Ph.D.]. University of Pennsylvania.

Sunderman, G. L., Coghlan, E., & Mintrop, R. (2017). *School Closure as a Strategy to Remedy Low Performance*. National Education Policy Center. http://nepc.colorado.edu/publication/closures

Taylor, H. L., McGlynn, L., & Luter, D. G. (2013). *Public Schools as Neighborhood Anchor Institutions: The Choice Neighborhood Initiative in Buffalo*, New York (K. L. Patterson & R. M. Silverman, Eds.; pp. 109–135).

Theodos, B., Hangen, E., & Meixell, B. (2019). *The Black butterfly: Racial segregation and investment patterns in Baltimore.* The Urban Institute. https://apps.urban.org/features/baltimore-investment-flows/

U.S. Census Bureau. (n.d.). *U.S. Census Bureau QuickFacts*. https://www.census.gov/quickfacts/fact/table/baltimorecitymarylandcounty/AGE295219

Warren, M. (2013). Public schools as a center for building social capital in urban communities: A case study of the Logan Square Neighborhood Association in Chicago. In K. L. Patterson & R. M. Silverman (Eds.), *Schools and urban revitalization: Rethinking institutions and community development* (pp. 168–184). Routledge.

Weber, R., Farmer, S., & Donoghue, M. (2016). *Why these schools? Explaining school closures in Chicago 2000-2013*. UIC Great Cities Institute. https://greatcities.uic.edu/wp-content/uploads/2017/01/School-Closure.pdf

Wolf-Powers, L. (2014). *Understanding community development in a "theory of action" framework: Norms, markets, justice*. Planning Theory & Practice, 15(2), 202–219. http://dx.doi.org/10.1080/14649357.2014.905621

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VERTICAL SCHOOLS AS COMMUNITY HUBS

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Abstract

Vertical schools, relatively new to Australia, are responding to increasing student numbers in central suburbs with limited available land. School facilities and spaces for drama, music, exercise, socialising, craft, play and eating are typically located for potential community use. The analysis within this paper focuses on the traces of community connections that can be discovered from visual analysis of plans and occupied buildings. We compare emerging Australian vertical schools with European precedents. How and why are communities using school spaces? What community spaces do students use and what are their adjacencies with school uses? What are the private, privileged and public spaces of vertical schools? Which schools operate as gated communities and how do the more porous examples address the safety of children? We consider northern European examples where vertical schools have had a longer history. Examples include the influential Danish Hellerup School, Ørestad Gymnasium, Sydhavnen School, the Finnish Saunalahti School and the Swedish Barkaby School. This forms part of a larger analysis of vertical schools in Australia and overseas the authors are proposing to undertake.

Keywords: vertical schools; community hubs; urban communities; urban consolidation; community planning; learning environments

Vertical Schools as Community Hubs

Vertical schools of four or more storeys in height are starting to be constructed in most Australia capital cities. While common in Europe and Asia, vertical schools are a relatively recent phenomenon in Australia, developed in response to changing demographics within the centres of our capital cities. The vertical school typology represents a radical departure from designs with multiple low-rise buildings (although designs in the 1920s and 1930s were often three stories) linked by covered walkways and often on large land parcels with plentiful green space (Matthews, 2018; Swinburn, 2017). Vertical schools are typically contained in one, sometimes two, buildings.

Australian urban consolidation and policies encouraging city residential development have been accelerating since the 1990s (Newton, 2019; Matthews, 2018; Swinburn, 2017). Increasing school-age populations in urban cores, high land prices and a scarcity of suitable sites make vertical schools an economic alternative to long-standing cultural preference for low-rise schools in the suburbs. This approach is helping to accommodate an estimated million additional Australian school students in the next two decades (Blandy, 2017; Goss, 2016).

Schools must be designed to function well as learning environments, but should schools also be designed as social infrastructure for the broader school community? A recent survey of Australian parents and educators found schools provide 'hubs of community' that bring social benefits beyond learning (Renton & Stobbe, 2020, p.14). Survey participants perceived that schools have become more inclusive over the past five years in terms of ethnicity, gender and religion. Supporting diverse communities is important given Australia's multicultural composition.

The Community Hubs Australia project was designed to promote social inclusion and cohesion and included 8000 families from over 100 countries of origin. Evaluation of the program noted the benefits for migrant families and school readiness of taking an integrated approach to delivering community services (Rushton, et al., 2017). Opening schools to diverse communities has design implications as well as management and governance implications. For example, the entry design can be welcoming or a barrier. School facilities and spaces for drama, music, exercise, socialising, craft, play and eating can be located for potential community use or for school use alone.

This paper focuses on the traces of community connections that can be discovered from visual analysis of plans and occupied buildings. These are compared with northern European examples, where vertical schools have a longer history. It considers various forms of space and their uses, permeability, safety issues and other conditioning factors that influence community use of vertical schools. Examples include the influential Danish Hellerup School, Ørestad Gymnasium, Sydhavnen School and International School, the Finnish Saunalahti School and the Swedish Barkaby School.

Background and Context

In Australia's large capital cities urban consolidation policies aim to densify and enliven urban areas while reducing suburban sprawl (Raynor, Mayere and Matthews, 2018). Increasingly some families are choosing to remain in urban core areas slowly reversing a long-standing suburban preference among Australian households with young children. As one example, enrolments for inner city schools in Sydney have risen by more than 13 per cent – nearly 3.5 times the state average – since 2012 (Swinburn, 2017). Consequently, there is escalating demand for inner-urban school spaces which, along with limited land availability, is leading to the emergence of vertical schools (Truong et al., 2018).

All Australian states except Tasmania are developing vertical schools. The Australian vertical school phenomenon can be divided typologically into mid-rise and high-rise. Most are mid-rise, between four and seven storeys, but taller schools from 10 to 17 storeys have been opened in New South Wales and Victoria (Newton, 2019). These new vertical schools and their campuses, like all schools, will be important forms of social infrastructure that are connected in complex ways to their proximate built, natural and material environments (Botsoglou et al., 2019; McLeod, 2014). Creating schools that function well as learning environments and as social infrastructure requires collaboration between educators, design professionals and other stakeholders including urban planners, policymakers and parents (Halarewicz, 2017).

Analysis

Table 1 lists the early examples of vertical schools in Australia. Design themes emerged as we contrasted early Australian vertical schools with European examples.

We found similarities in the types of facilities shared between schools and communities, but we also found distinctive issues related to the design of entry experiences as well as boundary conditions. We noted different arrangements for outdoor spaces and different attitudes to community and risk. These themes are often interconnected. For example, attitudes to risk aversion impact the entry arrangement and whether there are supervised gateways between spaces for the community and spaces for students.

Facilities shared between communities and schools

Australian vertical schools benefit by proximity to community facilities and vice versa. St Andrew's Cathedral School is Australia's oldest vertical school, having been built in 1976. Students occupy the top three levels of the eight-storey brutalist office building in central Sydney and use the adjacent cathedral as an auditorium, the city library and museum for learning, and the playing fields at the University of Sydney (Curnow & Lambert, 2015). Likewise, the university makes use of St Andrew's classrooms after hours.

Melbourne's first vertical school is the city campus of Haileybury private school, as shown in Figure 1. The 2017 retrofit of a thirty-year-old office building was in response to the rapidly expanding city

Table 1

Vertical Schools in Australia

School name	State	Location	Years	Date	Peak Enrol	Levels
St Andrew's Cathedral Sc[1]	NSW	Sydney CBD	K-12	1976	1100	Top 3 of 8
Arthur Philip HS[2]	NSW	Parramatta	7-12	2020	2000	17
Parramatta Public[2]	NSW	Parramatta	F-6	2020	1000	4
Inner Sydney HS[3]	NSW	Surry Hills	7-12	2020	1200	11
Inner City North SC[4]	QLD	Fortitude Valley	7-12	2020	1500	7
Inner City South SC[5]	QLD	South Brisbane	7-12	2021	1650	
Adelaide Botanic HS[6]	SA	Adelaide CBD	7-12	2019	1250	7
Haileybury City Campus[7]	VIC	Melbourne CBD	EL-12	2017	800	10
South Melbourne PS[8]	VIC	South Melbourne	F-6	2018	525	6
Richmond HS[8]	VIC	Richmond	7-12	2019	650	4
Prahran HS[9]	VIC	Prahran	7-12	2019	650	5

Note: [1] Noel Bell and Herbert F Hely | [2] Grimshaw Architects with BVN | [3] FJMT Architects | [4] Cox Architecture with Thomson Adsett | [5] BVN Architects | [6] Cox Architecture with Design Inc | [7] Darren Carnell Architects | [8] Hayball Architects | [9] Gray Puksand Architects

Figure 1

Haileybury City Campus



Source: Haileybury School. Photographer: Chris Kappa.

residential population revealed in the 2011 census. Like St Andrew's, Haileybury benefits from its central city location for cultural, educational, sporting and recreational facilities.

Adelaide's Botanic High School (Fig. 2) links six learning levels in a repurposed university building with a new seven-storey building. Botanic High also makes use of adjacent city facilities for teaching and learning, particularly the nearby botanic gardens and parklands. In contrast, the northern European schools studied tend to be further from the city centres in areas with extensive apartment living.

Community use of outdoor spaces

Of the Australian vertical schools, Botanic High is most like the European precedents in terms of how outdoor spaces are freely available for use by the broader community outside school hours. The school-to-community boundaries are porous and only semi-defined by height-level changes with robust outdoor tables and chairs openly accessible. In Copenhagen, the local authority takes responsibility for maintenance of the school's outdoor spaces of Sydhavnen Skolen with even the school roof, constructed as an outdoor landscape of timber steps, accessible to the community (Fig. 3).

Figure 2

Outdoor Spaces, Adelaide Botanic High School



Source: Cox Architecture.

Figure 3

Outdoor Spaces,Sydhavnen Skolen, Copenhagen



Source: Image by author.

Richmond High School, in the inner urban ring of Melbourne, has outdoor spaces that, while fenced, are kept open after hours and on weekends for use by the community. Outdoor spaces with playground equipment are particularly valuable in inner city areas as more families occupy apartments with limited outdoor areas.

Community and school co-use of indoor spaces

The broader community of Richmond benefits from after-hours access. Rather than a hard line separating school-use and community-use, there are interstitial spaces used by multiple groups near the entry areas such as spaces for drama and music. The school is located near community sports facilities including a pool and netball courts. The additional gymnasium, built as part of the school, is used by both the local community and the school, thereby extending the opening hours and resulting in more efficient infrastructure use.

Two other medium-scale vertical schools were opened at similar times to Richmond High School in other inner ring suburbs of Melbourne. The six-level South Melbourne Primary School was conceptualised in the context of the new and dense Docklands urban community.

The design brief envisaged school spaces might support residents living in nearby apartments by accommodating after-hours use of facilities such as makerspaces, gathering spaces for meetings as well

as access to music, drama and sports areas. Prahran High School has a rooftop gymnasium, garden and running track that are likewise envisaged for after-hours use by community.

On its Education Department website the Victorian State Government provides policy, guidance and resources for schools wishing to hire, license or develop shared use agreements. In 2006, Victorian School Councils were encouraged to enter into third party agreements for the use of school facilities when not required for ordinary school use. The policy stipulates that fees paid cannot be higher than required for cost recovery (School Operations, 2020). This is to encourage more efficient and equitable access to government-funded community infrastructure.

The symbolic and functional importance of central atria

The Victorian and South Australian vertical schools are designed around a central atrium, forming a visual heart and gathering space for each school as well as connecting the vertical levels and making learning spaces more visible. This is in contrast with traditional classrooms off corridors. Rather than just connecting levels with staircases, seating is provided by the stairs. These have become known as Hellerup stairs given early use at Hellerup School in Copenhagen by Arkitema Architects (Fig. 4).

South Melbourne Primary School uses the central stairs as a mini theatre space. Students use the central stairs of Prahran High School for presentations but also for informal gathering or study (Fig. 5). Richmond High School has a smaller Hellerup-model stairway located just inside the entry. Rather than

Figure 4

Hellerup, Copenhagen



Source: Image by author.

Figure 5

Prahran High School, Melbourne



Source: Gray Puksand.

facing a staff-controlled desk, students enter the school into the atrium each day to be welcomed by the principal. With seating on the stairs to the side and a canteen nearby, this entry sequence is similar to many of the northern European examples where the boundaries between public and private are blurred.

Blurred boundaries versus gated communities

The three Copenhagen schools considered within this paper each have entry sequences rather than controlled access gateways with reception desks in public foyers. Visitors enter Hellerup School through a recreation room to reach the central stairway. At the Sydhavnen School administration staff can view the entry from an upper level rather than in a control desk area near the entry. Visitors arrive into a double height space with student artwork and a mix of informal furniture. There is a view through the dining area to the outdoor spaces. Ørestad Gymnasium, by 3XN Architects, has a traditional formal entry mid-way along its rectilinear and colourful façade, but inside, the visitor enters into an atrium where boomerang shaped floor platforms hold circular learning pods, often cantilevered into the atrium. On entering each of these buildings, visitors move from a *public space* to a *privileged* or *invited* space before reaching the more *private* learning spaces within the school.

Visitors entering schools in Australia are generally overtly controlled with reception areas acting as gateways between a public foyer and the school beyond. New schools developed for the Victorian School Building Authority often have separate student waiting areas from the waiting areas used by the public.

Perceived and real risks

A topic worthy of further exploration is how community attitudes towards risk impact the design of schools. The playground of Sydhavnen School is adjacent to a canal, but the school community chose to keep the canal unfenced on the basis that children needed to learn to be safe near canals. The roofscape can be played upon as a large stair with few handrails (Fig. 3). In Australia, such a play surface might be perceived as unsafe.

Student classrooms and outdoor areas in American and UK schools have highly controlled access points. Public access to the northern European schools appears to be less clearly defined by the architecture. The Swedish school of Herrestaskolan by Liljewall Architects uses signage to orient visitors rather than a reception entry desk (Fig. 6).

Urban presence

Seeing into learning spaces from public paths is not unusual in the European schools. The Finnish Saunalahti School teaching spaces and the Herrestaskolan gymnasium both havehas windows on to the public paths adjacent (Fig. 7). Figure 8 shows views from Sydhavnen School to the public street. Vertical schools in Europe are often built up to the external boundary adjacent to roads and footpaths whereas in Australia we tend to avoid the public viewing into areas occupied by children by ensuring learning spaces

Figure 6

Entry sequence with signage, Herrestaskolan, Sweden



Source: Images by author.

Figure 7

Entry sequence with signage, Herrestaskolan, Sweden



Source: Images by author.

are distanced from public areas or separating with the use of a corridor.

Co-located community functions

We have not yet visited many Australian or northern European examples of co-located community facilities such as community centres and kindergartens in vertical schools. Arthur Philip High School, the first public high-rise school in NSW, has provided flexibility for future community uses. Fiep Westerdorp (Fig. 9) in Amsterdam has the collocation of a school, nursing home and apartment complex around a shared playground. While visiting this school we spoke with a waiting parent who explained the convenience of living in the adjacent apartment as he used a wheelchair. Mixing generations is sometimes regarded as having mutual benefits (Warner, Homsy & Greenhouse; 2010). Anecdotally, teachers we spoke to at Fiep Westerdorp and residents in the adjacent nursing home did not see the relationship between the school and the nursing home as being synergistic. Further research is needed to better understand why.

Calvijn College (Fig. 10) in Amsterdam by Wiersema Architects, has a program entitled NEXT,

Figure 8

Entry sequence with signage, Herrestaskolan, Sweden



Source: Images by author.

Figure 9

Mixed uses of Fiep Westerdorp



Source: Images by author.

Figure 10

Shared spaces for young and old at Calvijn College



Source: Images by author.

where students connect with local communities in a range of ways including preparing and serving meals for older local residents as part of an internship. Kitchens are used for events and the sports program and a training in hairdressing and beauty are interconnected to community with a range of partner organisations contributing to the student education.

Conclusion

The complexity of research into community hubs

As vertical schools become more prevalent in Australian cities, it is necessary to deeply explore the complexities of how these vertical schools operate as community hubs in the Australian context. This new type of school campus has the potential to create innovative and desirable learning and community spaces if designed correctly. Hopefully Australian governments will support this view. Lessons on good practice from overseas are a helpful first step. The next, more critical phase of research requires location and context-specific investigations of vertical school development in Australia. Quality research will help maximise community and learning outcomes from this new and vital form of social infrastructure. This can ensure that future vertical schools meet the needs of their communities, as well as facilitating great learning outcomes for students.

References

Blandy, S. (2018). *Is your school feeling the pressure?* .id The Population Experts, https://blog.id.com.au/2018/location-analysis/is-your-school-feeling-the-pressure/

Botsoglou, K., Beazidou, E., Kougioumtzidou, E. & Vlachou, M. (2019). *Listening to children: Using the ECERS-R and Mosaic approach to improve learning environments – A case study*. Early Child Development and Care, 189(4), 635-649.

Curnow, J. & Lambert, M. (2015). *Australia's future schools*, Hames Sharley, https://www.hamessharley.com.au/knowledge/australias-future-schools

Goss, P. (2016). *Should you worry about a schools shortage? It really depends where you live.* The Conversation. Available from https://theconversation.com/should-you-worry-about-a-schools-shortage-it-really-depends-on-where-you-live-53296 (last accessed 20 August 2020).

Halarewicz, A. (2017). *Study of selected components of architectural environment of primary schools - Preferences of adults and analysis of the specialist literature*. IOP Conference Series: Materials Science and Engineering, 245.

Matthews, T. (2018). *The high-rise future of schools*. Paper presented at Schools infrastructure Summit, Sydney, October 20-31, 2018.

McLeod, J. (2014). *Space, place and purpose in designing Australian schools*. History of Education Review, 43(2), 133-137.

Newton, C. (2019). *Vertical schools on the rise in Australian cities*. Architecture Australia, 108(5), 86.

Raynor, K., Mayere, S. & Matthews. T. (2018). *Do "city shapers" really support urban consolidation? The case of Brisbane, Australia*. Urban Studies. 55(5), 1056-1075.

Renton, S. & Stobbe, K. (2020). *The future of education, 2020: Exploring wellbeing, post-school pathways and the role of schools in building community*, Education Future Forum, McCrindle Research Pty Ltd.

Rushton, S., Fry, R., Moore, T., Arefadib, N. & West, S., (2017). *Exploring the impact of community hubs on school readiness*. Centre for Community Child Health, Murdoch Childrens Research Institute.

School Operations, (2020). *Community use of schools—Hiring, licensing and community joint use agreements*. Education.vic.gov.au. https://www2.education.vic.gov.au/pal/community-use-schools-hiring-licensing-and-community-joint-use-agreements/policy

Swinburn, A. (2017). *Vertical school design: strategising the spatial configuration of a multi-storey typology to facilitate education in dense city environments*. Byera Hadley Travelling Scholarships Journal Series.

Truong, S., Singh, M., Reid, C., Gray, T. & Ward, K. (2018). *Vertical schooling and learning transformations in curriculum research: points and counterpoints in outdoor education and sustainability*. Curriculum Perspectives, 28.

Warner, M., Homsy, G. & Greenhouse, E, (2010). *Multi-generational community planning: Linking the needs of children and older adults*. Public Administration Faculty Scholarship, 1. https://orb.binghamton.edu/public_admin_fac/1

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OUTSIDE THE CLASSROOM: SPATIAL CONSIDERATIONS TO FACILITATE COMMUNITY RELATIONSHIPS WITH SCHOOLS

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Abstract

Densification of urban environments has led to increased pressure on existing school infrastructure throughout Australia's major cities and elsewhere. Schools have continued to evolve as part of this process and facilities are more frequently leveraged for both public use and enabled for a range of education-related activities that foster community building. Design and procurement of schools currently builds upon acceptable minimum standards that often lack generosity to establish social spaces and spatial facilities that can be 'borrowed' by external users and provide critical social benefits. Through a review of New South Wales' planning policy this article aims to identify the benefits of providing school infrastructure facilities that compliment public assets. It also discusses the challenges faced with the delivery of these assets within an on-going trend of urbanisation. It is argued that on-going planning for school environments will need to consider a holistic, community-wide view through a considered approach to shared facilities.

Keywords: community schools; educational planning; urban planning; urban schools; vertical schools; Australia

Outside the Classroom:
Spatial Considerations to Facilitate Community Relationships with Schools

The ongoing discussion between today's planning and policy makers about the best use of land within cities is particularly evident when such land use focuses on the delivery of public assets (Infrastructure NSW, 2018). School and community facilities have gathered increasing interest within this context. Stakeholders are seeking measurable gains in the performance of these facilities and aim to build upon the value created while ensuring there is effective ongoing investment (Infrastructure Australia, 2019). Both schools and local communities are in the position of there being competing demand for open space and facility use while innovative partnerships are being formed to help achieve positive outcomes.

Background on schools and community within Australia

The diverse choice of schooling options available today has been formed from what was quite a different setting throughout Australia during the nineteenth and early part of twentieth centuries (Miller & Davey, 1990). Where once there was a clear separation between home and school life (Vick, 1990), the rise of 'comprehensive schools' in the 1960s and 1970s focused on a geographically defined district with goals of equal opportunity, collective socialisation and connection with the community.

The policy development that followed included the de-zoning of geographically constrained schools to cater for market selection. Government schools have continued to be affected by these changes, where 'community' around schools means less and less about the proximity of families to the campus (Campbell & Proctor, 2014).

Planning of schools - Current scenario in NSW

Sydney, like other Australian capital cities, is in a current state of transformation led by strategic planning visions that express the need to reshape the city environment with a planned focus on infrastructure and collaboration (Greater Sydney Commission, 2018). Land economies within established middle and inner city areas are contested between the on-going demand for housing and the need to provide social and community assets required to make cities liveable, sustainable and able to respond to issues of disadvantage (City of Sydney, 2008).

As more than 80% of student growth within NSW is expected to occur within metropolitan Sydney, schools within the city area face the combined pressures of growing enrolments and scarcity of land supply. Acknowledgement of this issue has led to changes in the physical composition of planned schools, both in the arrangement of classroom and teaching spaces (with a renewed focus on verticality) but also non-teaching spaces. The NSW government's 'School Assets Strategic Plan' identifies key changes in this regard and in some cases proposes the near doubling of school enrolment numbers while also reducing spatial size by half (in effect a quadrupling of student density) (Infrastructure NSW, 2018). While

recommendations for the Plan acknowledge the required need to rethink the architecture of the school itself, an understanding of the impacts to both programmed and non-programmed open space is absent.

Such quantitative approaches to school development are useful for achieving a 'streamlined' approach to upgrading education facilities. In New South Wales the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) aims to enable a less cumbersome pathway to establish facilities within schools (Department of Planning Industry and Environment, 2017). However concern has been expressed concerning the ability of such broad planning instruments to be properly accountable for the provision of open space and density, particularly where development by-passes usual authority approvals (Federation of Parents and Citizens Associations of New South Wales, 2017).

Understanding the physical setting of schools

There is a general consensus between educators, education planners and community groups that schools well integrated into their community and offering rich assets available for both educational and community use, are beneficial for all parties (Haar & Robbins, 2002; Krishnamurthy, 2019; Mckoy et al., 2011). While there is comprehensive literature to assist when planning for assets with established spatial standards (for example libraries and community halls), open space and green space issues have not received the same level of attention to inform their delivery (Evans & Freestone, 2011). This begins to shape questions around both the quantity and the quality of open space needed for a school, how the school or community might leverage existing open space within the local surroundings, and how the community might benefit from open space provided by the school.

Green open spaces

Within school planning, open space can be thought of as anything outside the land area built on, while green open space is regarded as the landscaped parts within the former (Victorian Planning Authority, 2017). Studies show that both in schools and within the community access to green space is important for the development of young children, providing it benefits not only physical health but also mental development and enhanced academic outcomes (Krishnamurthy, 2019; Nauert, 2018).

Green open space has been found to provide a vast array of benefits, particularly at the local scale (Ives et al., 2014), yet while our major cities are densifying there will be challenges to accommodate more open space within a finite land supply (City of Sydney, 2016b) and this in part forms the public opinion about a schools' quality and performance (Baker & Gladstone, 2019). In 2019 the NSW Government announced its vision to support additional open space and parklands for Sydney (Sullivan, 2020) along with the establishment of a Greater Sydney Parklands Agency. This vision aims to empower the government to better co-ordinate land use and management through the implementation of a forthcoming

Design and Place State Environmental Planning Policy which brings contextual relationships to the fore. It is unknown at this stage how school planning will be included.

Tools such as the New South Wales Educational Facilities Standards and Guidelines (EFSG) are useful starting points to enable the efficient planning of school spaces (Department of Education, 2020). Here, basic minimum dimensions and descriptions of open play space types are included within a toolset. However, an understanding of how these dimensions have been established or the quality of the open spaces is less detailed. Similarly, objectives around landscape and the integration with community are listed, but relate to the physical context rather than the societal one.

Agreeing on the right amount of open space for schools is a challenge, though the common opinion is that bigger is not always better where the correlation between larger schools and lower student outcomes is made (Leithwood & Jantzi, 2009; Schneider, 2002). Similarly, there are arguments that the overall amount of play space matters less than the actual time available for play (Sahlberg, 2019) and that the programming and design of the space impacts physical activity in certain cases more than the quantity of open space (Grunseit et al., 2020). These findings point towards the need for consolidated and purposeful outdoor environments where physical size is balanced with opportunity and quality.

Community benefits

Overarching the debate about the provision of open space facilities is the theme that they are both beneficial to the student and to the community. Education facilities and their supply of playing fields, sporting halls, libraries and performing art spaces are just some of the assets that are recognised as essential to forming part of an integrated service delivery that can provide positive outcomes within a community (Mckoy et al., 2011). Schools are noted here for their ability to engage people of diverse ages and backgrounds and also through their role as established education providers, forming a position of trust within community groups (Diamond & Freudenberg, 2016).

The concept of the school as a community hub has been formed throughout varying degrees of school–community service sharing but has grown as a central point of discourse along with the theme of infrastructure delivery efficiency in general (McShane et al., 2012). In the case of open space, schools have been recognised to have the potential to act as a ‘green hub’, providing the opportunities for physical activity and other open space use to the broader community (Department of Science Information Technology Innovation and the Arts, 2011). It should be noted that this is not simply a case of adding a playing field and anticipating successful community engagement. Cases identified by the Queensland Chief Scientist and elsewhere (Haar & Robbins, 2002; Khadduri et al., 2007) show that successful outcomes within the community rely upon early formed partnerships as part of the planning process and, importantly, require schools that are designed to be open and connected to their physical neighbourhood.

Schools within the community – forming partnerships

Access to schools, sporting fields, community centres and libraries is increasingly being recognised as beneficial to increasing the quality of life and social inclusiveness within communities (City of Sydney, 2016a). Yet policy and funding change continues to leave schools facing common challenges of under-funding, ageing building stock, increasing enrolments, and increased usage demand by groups outside of the student population (Infrastructure Australia, 2019).

In 2017 the NSW Legislative council concluded an investigation into (Sydney) Inner-city public-school enrolment capacity and published seven key recommendations. The recommendations focused on: amendment of the inner city school cluster model to emphasise the importance of connecting schools with their communities; update of the NSW Department of Education demographics projections and the sharing of this information with councils; better co-ordination between State entities in the development and planning of schools including future land identification; and a requirement that standards around the assessment of land remediation (for future school use) should rely on standards set by the relevant authority (Legislative Council New South Wales, 2017). Governments have acknowledged these issues and adjusted the language around infrastructure priorities to frequently seek community benefits and participation in schools (for example; Victorian Competition and Efficiency Commission, 2009) with the output of these often resulting in partnership programs and the joint use of facilities.

Both NSW and Victoria have published policy guidelines that help guide schools and local governments to move beyond simple co-location of assets and to develop 'key community hubs'. Documents such as New South Wales' Community Use of School Facilities implementation procedures and Victoria's Shared Facility Partnerships - A Guide to Good Governance for Schools and the Community, give detailed guidance to schools on the process of implementing partnerships to share facilities. Reliance on participation here is not limited to the initial planning or upgrade of schools, but to their on-going success as nurturers of successful students and the enhancement of community through local networks of social support (Black, 2008). How to adequately represent the community in some cases (Sanders, 2020) or to encourage participation in others (Mcshane et al., 2012) remains a challenge. The inclusion of community stakeholders in the conversation for the planning of shared facilities is more commonly seen as a benefit to achieving positive outcomes. Continued knowledge- and success-sharing, combined with adequate resourcing to engage communities from both the government and school, will likely play a key role in the formation of these hubs.

Moving forward

The unpacking of a school into spatial 'compartments' has the tendency to be short-sighted in relation to the possible benefits for student and community. Holistic planning for schools and communities around open space is essential to ensure access to the benefits it provides. Policies around open space,

education and shared use continue to be developed and currently include the aim of forming better partnerships between schools and their community and improving the outcomes for both. As policy continues to evolve, policy makers' co-operative models of engagement with all users have the potential to identify gaps and shortcomings in open space provision. While integrated school planning and innovative approaches to partnership models may promote learning spaces/community facilities that are adaptable and can support a range of activities for multiple users, on-going evaluation of these tools and policy development should be undertaken to identify positive outcomes for both students and their communities.

References

Baker, J., & Gladstone, N. (2019, November 20). *Sydney schools running out of play space.* Sydney Morning Herald. https://www.smh.com.au/national/nsw/sydney-schools-running-out-of-play-space-20191120-p53ci4.html

Black, R. (2008). *Beyond the Classroom: Building New School Networks*. Australian Council for Educational Research.

Campbell, C., & Proctor, H. (2014). *A History of Australian Schooling.* Allen and Unwin.

City of Sydney. (2008). *Sustainable Sydney 2030: Community Strategic Plan 2017-2021.* https://www.cityofsydney.nsw.gov.au/__data/assets/pdf_file/0011/288173/Adopted-Sustainable-Sydney-2030_Accessible-Version.pdf

City of Sydney. (2016a). A City for All - Towards a socially just and resilient Sydney. In *The Upside of Aging.* https://doi.org/10.1002/9781118691823.ch10

City of Sydney. (2016b). *Open Space, Sports and Recreation Needs Study 2016* (Vol. 1, Issue November). http://www.cityofsydney.nsw.gov.au/__data/assets/pdf_file/0003/138720/Adopted-Open-Space-Sport-Rec-Needs-Study-2016-Vol-1_Part1.pdf

Department of Education. (2020). *Educational Facilities Standards and Guidelines*. https://efsg.det.nsw.edu.au/welcome

Department of Planning Industry and Environment. (2017). *State Environmental Planning Policy* (Educational Establishments and Child Care Facilities). https://www.legislation.nsw.gov.au/#/view/EPI/2017/494/full

Department of Science Information Technology Innovation and the Arts. (2011). *Innovating Queensland Communities.* https://www.chiefscientist.qld.gov.au/__data/assets/pdf_file/0009/50004/innovating-qld-communities-2014-12.pdf

Diamond, C., & Freudenberg, N. (2016). *Community Schools: a Public Health Opportunity to Reverse Urban Cycles of Disadvantage.* Journal of Urban Health, 93(6), 923–939. https://doi.org/10.1007/s11524-016-0082-5

Evans, C., & Freestone, R. (2011). *Policy challenges for metropolitan greenspace in Sydney.* State of Australian Cities Research Network. http://soac.fbe.unsw.edu.au/2011/papers/SOAC2011_0161_final.pdf

Federation of Parents and Citizens Associations of New South Wales. (2017). *Feedback in Relation to the Draft State Environmental Planning Policy* (Educational Establishments and Child Care Facilities). https://www.pandc.org.au/forms/Advocacy/Feedback in Relation to the Draft State Environmental Planning Policy.pdf

Greater Sydney Commission. (2018). *Greater Sydney Region Plan; A Metropolis of Three Cities* (Issue March). https://gsc-public-1.s3-ap-southeast-2.amazonaws.com/s3fs-public/greater-sydney-region-plan-0618_0.pdf?SsIsd8gyH4.nrDDg3eZ3PlOBWzWnC3CV

Grunseit, A. C., O'Hara, B. J., Drayton, B., Learnihan, V., Hardy, L. L., Clark, E., Klarenaar, P., & Engelen, L. (2020). Ecological study of playground space and physical activity among primary school children. BMJ Open, 10(6). https://doi.org/10.1136/bmjopen-2019-034586

Haar, S., & Robbins, M. (2002). Schools for Cities: Urban Strategies. In *National Endowment for the Arts*. Princeton Architectural Press.

Infrastructure Australia. (2019). *An Assessment of Australia's Future Infrastructure Needs - The Australian Infrastructure Audit 2019* (Issue June). https://www.infrastructureaustralia.gov.au/sites/default/files/2019-08/Australian Infrastructure Audit 2019.pdf

Infrastructure NSW. (2018). *Building Momentum, State Infrastructure Strategy 2018-2038*. https://insw-sis.visualise.today/documents/INSW_2018SIS_BuildingMomentum.pdf

Ives, C. D., Oke, C., Cooke, B., Gordon, A., & Bekessy, S. A. (2014). *Planning for green open space in urbanising landscapes.* October, 94. https://www.environment.gov.au/system/files/pages/25570c73-a276-4efb-82f4-16f802320e62/files/planning-green-open-space-report.pdf

Khadduri, J., Schwartz, H., & Turnham, J. (2007). *Reconnecting schools and neighborhoods*. https://www.abtassociates.com/files/Insights/reports/2008/64701.pdf

Krishnamurthy, S. (2019). *Reclaiming spaces: child inclusive urban design*. Cities & Health, 3(1–2), 86–98. https://doi.org/10.1080/23748834.2019.1586327

Legislative Council New South Wales. (2017). *Inner city public primary school enrolment capacity*. https://www.parliament.nsw.gov.au/lcdocs/inquiries/2415/Final Report 170213.pdf

Leithwood, K., & Jantzi, D. (2009). *A Review of Empirical Evidence About School Size Effects: A Policy Perspective.* Review of Educational Research, 79(1), 464–490. https://doi.org/https://doi.org/10.3102/0034654308326158

Mckoy, D. L., Vincent, J. M., & Bierbaum, A. H. (2011). *Opportunity-Rich Schools and Sustainable Communities. In Institute of Urban and Regional Development*, University of California. https://citiesandschools.berkeley.edu/reports/ccs_wwc_ report.pdf

McShane, I., Watkins, J., & Meredyth, D. (2012). *Schools as Community Hubs: Policy Contexts, Educational Rationales, and Design Challenges*. Jstor, 1–14. https://www.jstor.org/stable/1602710

Miller, P., & Davey, I. (1990). Family Formation, Schooling and the Patriarchal State. In M. Theobald & R. J. W. Selleck (Eds.), *Family, School and State in Australian History* (pp. 1–24). Allen and Unwin.

Nauert, R. (2018). *Green Space at School Improves Child Health*. Psych Central. https://psychcentral.com/news/2017/09/18/green-space-at-school-improves-child-health/126181.html

Sahlberg, P. (2019). *Let the Children Play: How more play will save our schools and help children thrive*. Oxford University Press.

Sanders, M. G. (2020). *Community involvement in schools: From concept to practice*. Education and Urban Society. https://doi.org/10.1177/0013124502239390

Schneider, M. (2002). *Do School Facilities Affect Academic Outcomes?* National Clearinghouse for Educational Facilities.

Sullivan, M. (2020). *Sydney parkland trusts to be folded into super agency.* https://www.smh.com.au/national/nsw/sydney-parkland-trusts-to-be-folded-into-super-agency-20200715-p55c7f.html

Vick, M. (1990). Their paramount duty. In M. Theobald & R. J. W. Selleck (Eds.), *Family, School and State in Australian History* (pp. 175–181). Allen and Unwin.

Victorian Competition and Efficiency Commission. (2009). *Getting it Together: An Inquiry into the Sharing of Government and Community Facilities* (Issue June). VCEC.

Victorian Planning Authority. (2017). *Open Space Types and Categories*. https://vpa.vic.gov.au/wp-content/uploads/2017/06/Metropolitan-Open-Space-Strategy-Open-Space-Category-Definitions.pdf

https://doi.org/10.26188/13289711

VERTICAL SCHOOLS AS COMMUNITY HUBS IN RESIDENTIAL NEIGHBOURHOODS

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Abstract

Vertical schools are created in response to increasing residential density and land scarcity in metropolitan areas. While these schools are often short of space for children's recreational activity, the neighbourhood is usually rich enough to offer such amenities to the students. Vertical schools also contain high-quality facilities that the community can hire out of school hours. As vertical schools and their communities become reliant on the use of shared spatial resources, their interdependencies should be considered at different stages of planning, design and management of schools. This paper aims to understand the successful urban design and planning considerations that lead to a convenient sharing of resources by vertical schools and their neighbourhoods. The possible influential physical, social and organisational dimensions have been discussed in this paper by studying the literature surrounding children's use of school neighbourhoods and analysing five vertical schools in Australia. The review and the analysis show that the physical dimensions include the presence of recreational spaces in the school and the neighbourhood, their location and the pedestrian network connectivity between the school and the neighbourhood facilities. The social characteristics include the volume of car traffic and pedestrian traffic in the neighbourhood, and parental concerns for children's travel to the external recreational resources. The organisational dimensions include road rules and services and the collaboration between the school and their local agencies. The study suggests that for the community to share the school and neighbourhood resources successfully, this framework may be taken into account. The shared use of facilities can strengthen the concept of vertical schools as community hubs and increase the availability of recreational resources for both children and other members of the community in high-density neighbourhoods.

Keywords: vertical schools, community hubs, recreational resources, neighbourhood facilities, school design and planning

Vertical Schools as Community Hubs in High-Density Residential Neighbourhoods

Vertical schools are created in response to increasing residential density and land scarcity in metropolitan areas. This typology is new in Australia and there are relatively few examples of multi-story educational facilities. These schools are often located in high-density residential neighbourhoods where families are most likely living in apartment buildings where children have limited space and play areas at home. While they and the apartment buildings are often short of space for children's recreational activity, the neighbourhood is usually rich enough to offer such amenities to the students. These schools often contain high-quality facilities that the community can hire and could be regarded as community hubs. As vertical schools and their communities become reliant on the use of shared spatial resources, their interdependencies should be considered at different stages of planning, design and management of the schools.

This paper presents some successful urban design and planning considerations that lead to a safe and convenient sharing of resources by vertical schools and their neighbourhoods. By drawing on a socio-ecological framework (Stokols 1992), it studies the literature surrounding children's active use of school neighbourhoods analysing five vertical schools in Australia to explore their physical, social and organisational dimensions. The analysis shows that the physical dimensions include both the characteristics of schools (presence of sports fields and common areas) and the characteristics of the neighbourhood (pedestrian network connectivity, presence of parks, library and grassed fields, and barriers for the protection of children from vehicles). The social characteristics include the number of students, volume of traffic in the neighbourhood, pedestrian traffic and parental concerns for children's travel around the neighbourhood. The organisational dimensions include road rules and services (presence of traffic control devices, street lighting, road crossing, parking lots) and collaboration between the school and their local agencies (facility management of schools and their neighbourhoods and administration of timetables for the shared use). The study suggests that for the community to share the school and neighbourhood resources successfully, these broad sets of characteristics can be used as a starting point to understand the need for developing a more comprehensive framework. The shared use of facilities can strengthen the concept of vertical schools as community hubs and increase the availability of recreational resources for both children and other members of the community in high-density neighbourhoods.

The need for vertical schools in high-density neighbourhoods

There has been a significant growth in the number of students in Australian metropolitan areas. In 2017 it was predicted that the number of students in NSW government schools would jump from 780,000 in 2016 to 944,500 by 2031 and 80 per cent of this population will occur in Sydney (Audit Office of New South Wales, 2017). Similarly, in 2016 it was predicted that Victorian schools would need to accommodate

90,000 extra students over the next five years (Victorian Department of Education and Training, 2016). In Sydney, West Central, South West and Central Sydney were expected to have an enrolment increase of 63%, with an extra 102,650 students from 2016 to 2031 (Audit Office of New South Wales, 2017). In Bourke Street Public School alone, the number of enrolments jumped from 190 in 2013 to 440 in 2019 (Bourke Street Public School Annual Report).

The increasing student populations will place pressure on schools unless there is an increase in school capacity. According to the report by the Audit Office of New South Wales (2017), five per cent, or 180 of NSW schools, are already above capacity and 10 per cent of the state's classrooms are demountable. To meet the increasing demand for school capacity, there is a need for the provision of more schools. Considering the capacity of schools in 2016, the state of New South Wales alone needed to cater for 96,500 extra primary students and 67,500 extra secondary students by 2031 to meet the population demand (Audit Office of New South Wales, 2017).

As the population grows in in high-density neighbourhoods horizontal school models are no longer financially viable. The NSW Government is increasingly looking to build vertical schools in inner-city areas where land is expensive and the population is booming. Vertical schools can meet the demand for schools and increase capacity in smaller sites.

Vertical Schools as Community Hubs

Vertical schools can be viewed as public infrastructure that directly benefits students as well as the broader community. Being situated in densely populated neighbourhoods, vertical schools can offer accessible amenities to the community. The Department of Education and the local councils can enter agreements such as hiring school facilities. The Ultimo Public School, for example, can offer a full-sized basketball court. Its covered outdoor learning area can be used for community weekend markets (Singhal, 2017). At South Melbourne Primary School the community kitchen forms part of the school's canteen and its full-size indoor basketball and netball court are used by Sport and Recreation Victoria (Vukovic, 2018). Likewise, the members of the community in Richmond High and Inner Sydney High are able to hire out the schools' multi-purpose rooms and sports facilities outside school hours (Cook, 2017; Singhal, 2018)

Students in vertical schools can benefit from a diverse range of facilities accessible in their local neighbourhood. The schools' restricted site for children's physical activity and limited access to natural environments are common constraints that make vertical schools reliant on the neighbourhood assets. The limited space at Ultimo Public school, for example, makes the school contingent on the available space in Wentworth Park located right opposite the street (NSW School Infrastructure, 2017). Similarly, Inner Sydney High needs exclusive access to parts of Prince Alfred Park to meet the minimum requirement of 10 square metres of open play space per student in NSW schools (City of Sydney meetings, 2018). The lack of greenery and quality outdoor spaces often negatively affects the instances of play essential to

children's development (Taylor et al., 1998).

Managing the shared use of school facilities and neighbourhood facilities requires planning at a broader scale than within the school. Apart from the presence of these facilities in the school program or in the neighbourhood, there are other influential physical, social and organisational dimensions that underpin successful shared use. Research shows that children's active use of urban neighbourhoods is positively associated with the continuity of pedestrian network (Rosenberg et al., 2009), land use mix and diversity of use (Larsen et al., 2009; Rosenberg et al., 2009), and parents' perception of the neighbourhood's safety (Babb et al., 2017; Buliung et al., 2017) which itself is linked with crime safety (Rosenberg et al., 2009) and the presence of barriers for the protection of children from vehicles such as street buffer, sidewalks and trees (Kweon et al., 2017).

Previous studies also show that children's active use of neighbourhood amenities is negatively linked with the traffic volume and transport speed (Aminpour, Bishop, and Corkery, in review) and distances to facilities (Broberg, Salminen, and Kyttä, 2012; Oliver et al., 2015; Larsen et al., 2009; Rosenberg et al., 2009). The management of available facilities out of school hours may also go beyond the capacity of school staff, and consequently, the community may not be able to hire them out (Swinburn, 2017). In a case study research project, Swinburn (2017) shows that vertical schools prefer to have private sports fields because booking these field in the neighbourhood park is subject to their availability and may not work for the students' scheduled games and regular physical education.

A review of literature suggests multiple environmental dimensions that may need to be considered when planning and designing vertical schools to become community hubs. The next section draws on the possible influential physical, social and organisational characteristics in the context of some local case studies. The aim is to lay out the current understandings of vertical schools' contexts and their relationship to the neighbourhood, probe expectations of how these relationships might improve in the future and demonstrate how a poor-quality link can impair the shared use of facilities.

Case Studies

The schools chosen as cases have common characteristics such as being newly built, located in high-density neighbourhoods with diversity of use, and in close proximity to parks or other recreational facilities (Table 1). They also feature some contrasting characteristics in terms of their connection with their neighbourhood.

South Melbourne Primary School

This was the first high-rise state school in Victoria, opened to primary school students and early learning students in 2018. The school (highlighted in Fig. 1) is located close to a recreational space and surrounded by offices and car parking between neighbouring buildings and along the streets (purple area

Table 1

Selected Vertical Schools

School name	Location	Nearby park space	Structure/size	Pax	Date	Designed by
South Melbourne Primary School	Southbank, VIC	no name	6-storey/ 5,000 m2 block of land	560	2018	Hayball
Haileybury City Campus (K-12)	Melbourne, VIC	Flagstaff Gardens	12-storey/ 13,000 m2	700	2017	Darren Carnell Architects
Ultimo Public School	Sydney, NSW	Wentworth Park	Sloping 3-storey	800	2020	DesignInc, Lacoste and Stevenson, Paris-based BMC2
Inner Sydney High School	Surry Hills, NSW	Prince Alfred Park	14-storey	1200	2020	FJMT
Botanic High School	Adelaide, SA	Botanic Park	6-storey	1250	2019	Cox Architecture, DesignInc

Figure 1

South Melbourne School Site



Source: Google Maps

on the map). The site analysis of the school suggests the presence of cars parked around the school does not encourage safe use of the nearby recreational space by the primary school-age children. Moreover, the abundance of office buildings surrounding the site and lack of commercial or residential buildings can discourage the pedestrian population around the school (Fig. 2).

The location of a school and the surrounding urban fabric can also influence both children's and families' use of school facilities out of school hours. The Victorian Government is working with the City of Port Phillip to ensure there is delivery of community facilities by the school. This includes the multi-purpose rooms and the indoor and outdoor sports courts (Victorian School Building Authority, n.d.). However, the school is not located in a site suitable for pedestrians being surrounded by industrial buildings and the school's catchment area is dissected by the M1 motorway. The community may have easier access to the sports courts close to Sol Green Reserve (south of the area) being surrounded by residential buildings or Docklands Sports Courts (north of the area) if they live north of the M1 motorway (Fig. 3). Similarly, families living in the eastern school catchment area have more convenient access to the Royal Botanic Gardens than the school facilities.

Figure 2

South Melbourne Primary School



Source: Google Street View

Figure 3

Sports courts available in South Melbourne Primary School catchment area



Source: Google Maps

Haileybury City Campus

The school is a 13,000 square-metre building with 1,500 square metres of outdoor green recreation space on three terraces and 1,000 square-metre indoor active recreation sporting facility. Considering the open play space requirement in Victorian schools (seven sqm per child) and the number of students the school is catering for (approximately 700 students), the students would need at least 4,900 metres of open play space. Given that the school has limited access to open space in-house, it becomes reliant on the use of nearby recreational spaces.

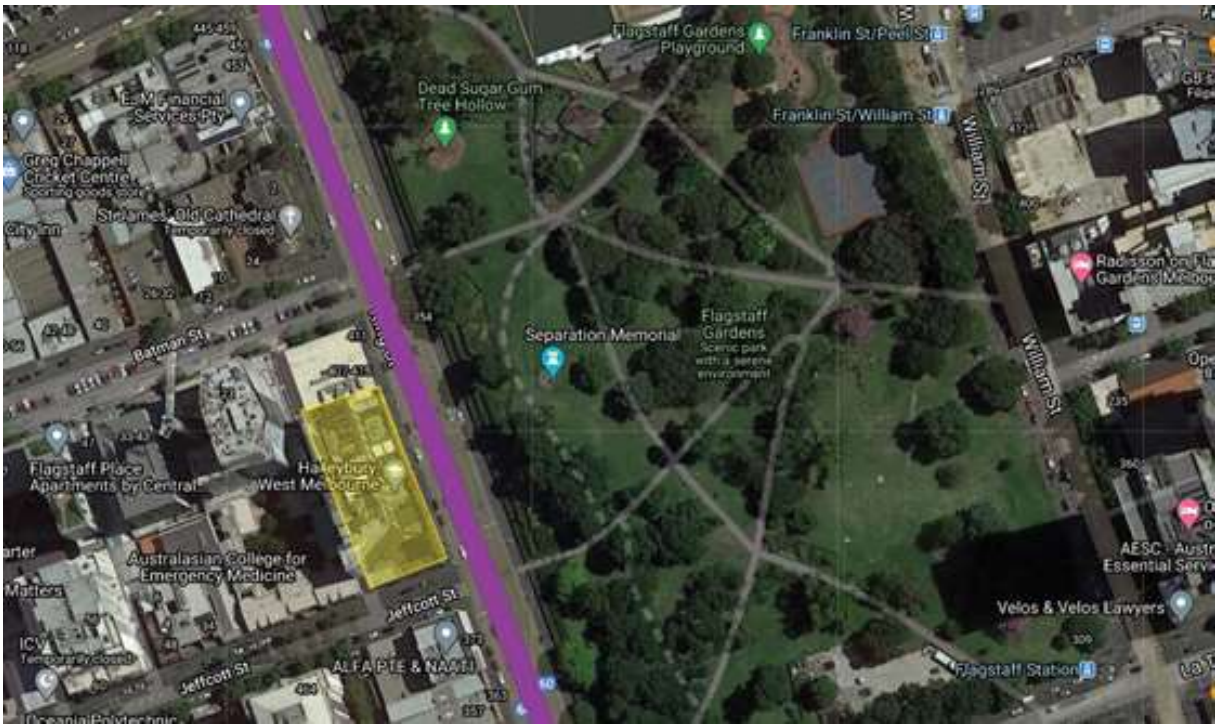
The campus is located directly opposite the Flagstaff Gardens, but the pedestrian connection between the two is not strong. Although this is a 40 km/hour area with traffic control devices such as road signals and speed controllers, King Street (the purple line in Fig. 4) is usually very busy. The safe crossing from the campus is only available with the traffic light (Fig. 5). The analysis suggests that for vertical schools to easily use the nearby natural environments, a safe and fortified pedestrian connection is required.

Ultimo Public School

The school is now catering 375 students but is expecting to accommodate an extra 525 pupils, bringing the school's total capacity to 800 students. When the school reaches its full capacity, the playground space will be insufficient for 800 students considering NSW schools open space requirements

Figure 4

Haileybury City campus opposite the Flagstaff Gardens



Source: Google Maps

Figure 5

King Street between the Haileybury City campus and Flagstaff Gardens



Source: Google Street View

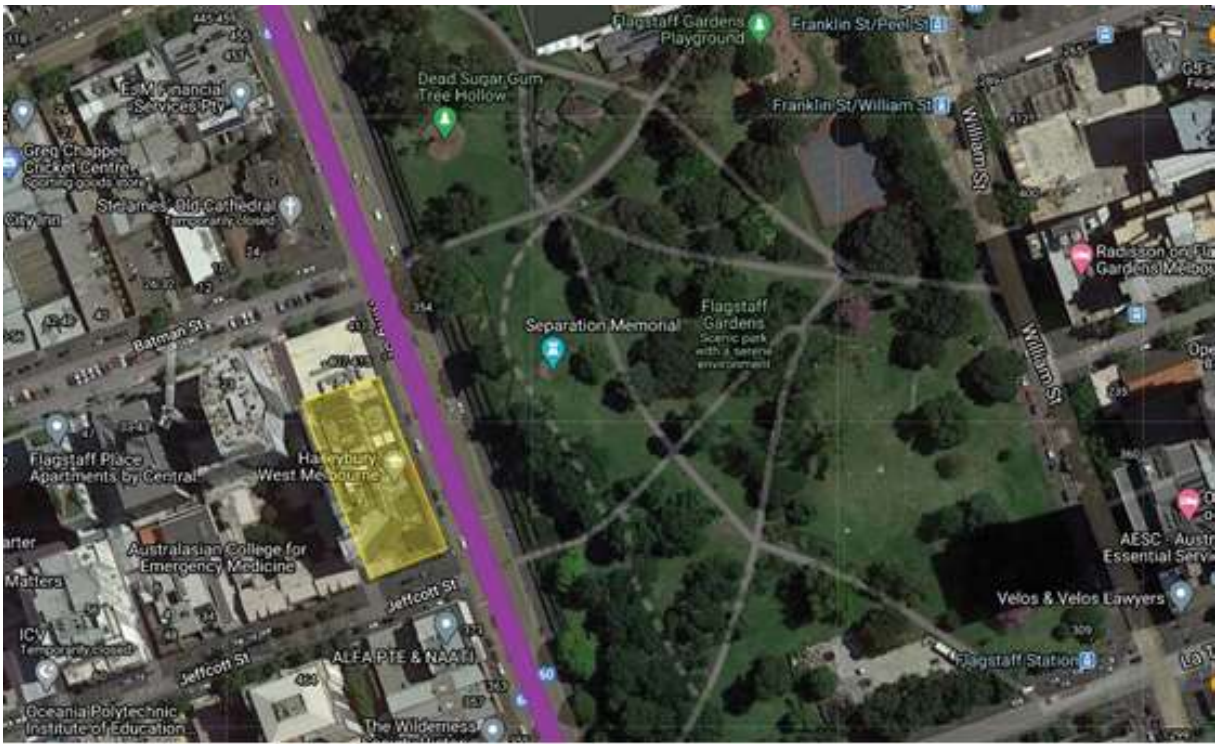
(i.e. 10 square metres per student) and the school therefore becomes dependent on the use of neighbourhood open spaces during recess (Singhal, 2017).

Similar to Haileybury's City campus, Ultimo Public School is located opposite the local park (Wentworth Park), separated from the school by a busy street. The main difference is the presence of a pedestrian bridge (in red in Fig. 6) which directly connects the school to Wentworth Park. The pedestrian bridge can provide a safe route from the school to the park during school hours.

The area surrounding the school is identified as a school zone with the speed limit of 40 km/hour during the school pick-up and drop-off time (i.e. 8-9:30 am and 2:30-4 pm) (Fig. 7). The analysis suggests that the speed limit could apply to the whole duration of school hours, if the neighbourhood facilities are to be used safely during the school program, morning tea or lunch time periods. The normal school zone rules could be adapted to the patterns of children's presence around the vertical schools' surrounding streets, as these schools tend to be more reliant on the use of neighbourhood facilities.

Figure 6

The pedestrian connection between Ultimo Public School and Wentworth Park by a pedestrian bridge



Source: Google Maps

Figure 7

The busy road between the Ultimo Public School and Wentworth Park



Source: Google Street View

Inner Sydney High School

This high school is located inside of the Prince Alfred Park with abundant green space and sports facilities (seven sports courts and a swimming pool). Children can access the park safely via pedestrian walkways without any disruption from car traffic (Fig. 8). The school is still accessible through Chalmers Street and Cleveland Street for pick-up or drop-off by cars. The site analysis suggests that corners of neighbourhood parks are more efficient locations for vertical schools compared to the opposite streets as they can encourage safer and more convenient use of facilities located in the parks.

The school is close to the edges of the catchment which covers suburbs as far as Woollahra, Darling Point and Pitts Point (Fig. 9). This means that children from the north of the area will be travelling distances as far as four kilometres to get to school from home. As the school is not well-connected to the precinct by cycling paths, the busy traffic roads can reduce the chances for children's active transport

Figure 8

The location of Inner Sydney High School in Prince Alfred Park

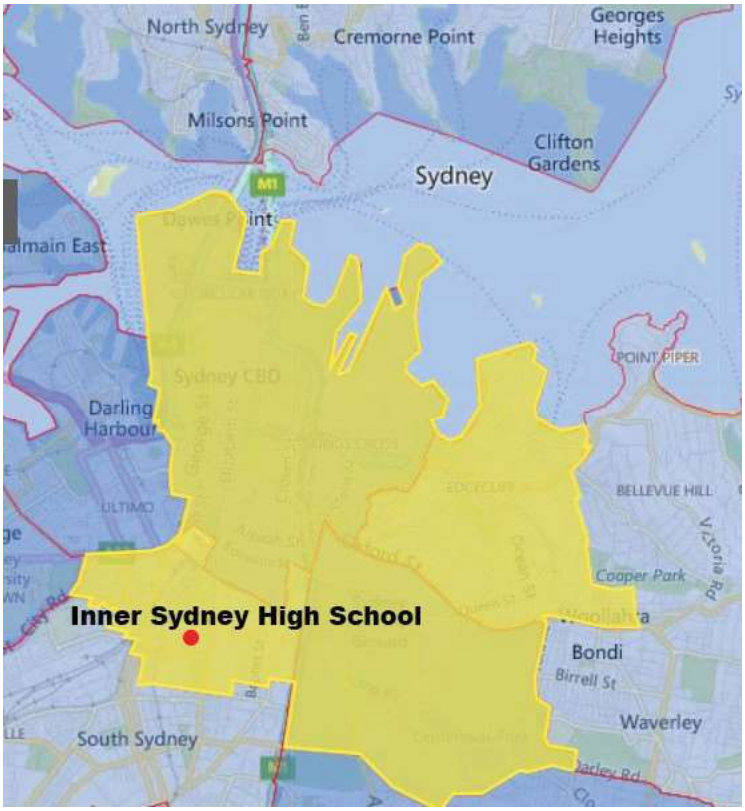


Source: Google Maps

options and their independent travel to school (Fig. 10). For schools to be community hubs, schools need to be located in closer proximity to the student's home or children get a chance for active and/or independent travel (McDonald and Aalborg, 2009).

Figure 9

Inner Sydney High School zone



Source: Schoolcatchment.com.au

Figure 10

Inner Sydney High School on the corner of Cleveland St and Chalmers St



Source: Google Street View

Botanic High School

Similar to Inner Sydney High School, this school is surrounded by parklands with multiple pedestrian connections. The students can have safe access not only to the abundant green space in the Botanic Gardens, but also to the museum, herbarium and conservatory, Adelaide Zoo, state library and performing arts facilities (Fig. 11). The strategic location of the school in the CBD provides the opportunity of using the neighbourhood resources in the school program. Vertical schools should be strategically located to enhance their relationship with the neighbouring facilities as the bond between this school typology and their neighbourhood tends to be stronger compared to the horizontal schools.

While schools' abundant access to the parklands is an advantage, building a school on parklands can cause concerns if the broader picture for the school development is not clear. The idea of redeveloping hard courts on the parklands was proposed for the use of students in Botanic High School. However, the plan was refused by Adelaide City Council which believed that the school would consume too much free land (Campbell, 2016). The Council believed that developing more playing fields on the parklands is not necessary the school has already access to plenty of sporting fields within walking distance, under-utilised on weekdays and playing fields with the University of Adelaide that could be shared with the school (Campbell, 2016).

Figure 11

The neighbourhood assets surrounding Botanic High School in Adelaide



Source: Google Maps

Conclusion

The analysis of the cases shows that the land use surrounding the school neighbourhood, the pedestrian network connectivity, the location of the school in the school catchment area, and road rules and services can influence the shared use of resources. The volume and speed of traffic and the presence of car parks on the site are factors that may raise parental concerns.

Other key issues arising from the analysis of these cases were:

- safe and fortified pedestrian connections to public spaces are required;
- normal school zone rules could be adapted to the patterns of children's presence in the schools' surrounding streets; and
- siting schools on corners of neighbourhood parks is more efficient than building them on the streets opposite them.

These findings point to the need to strategically locate schools to enhance their relationship with the neighbouring facilities. They can be explored further to yield useful insights about how the integration of vertical schools in their neighbourhood enhances shared use of facilities for a growing bond between the schools and their communities.

References

Audit Office of New South Wales (2017, May 4). *Planning for school infrastructure*. Retrieved from: https://www.audit.nsw.gov.au/our-work/reports/planning-for-school-infrastructure

Babb, C., Olaru, D., Curtis, C., & Robertson, D. (2017). *Children's active travel, local activity spaces and wellbeing: A case study in Perth, WA*. Travel behaviour and society, 9, 81-94. doi: https://doi.org/10.1016/j.tbs.2017.06.002

Bernard, P. (2016, May 12). *Victorian government school building projects – latest news*. CourtHealth Consulting. Retrieved from: https://www.courtheath.com.au/victorian-government-school-building-projects-latest-news/

Broberg, A., Kyttä, M., & Fagerholm, N. (2013). *Child-friendly urban structures: Bullerby revisited*. Journal of Environmental Psychology, 35, 110-120. doi: https://doi.org/10.1016/j.jenvp.2013.06.001

Broberg, A., Salminen, S., & Kyttä, M. (2013). *Physical environmental characteristics promoting independent and active transport to children's meaningful places.* Applied Geography, 38, 43-52. doi: https://doi.org/10.1016/j.apgeog.2012.11.014

Buliung, R. N., Larsen, K., Faulkner, G., & Ross, T. (2017). *Children's independent mobility in the City of Toronto, Canada*. Travel behaviour and society, 9, 58-69. doi: https://doi.org/10.1016/j.tbs.2017.06.001

Campbell, C. (2016, August 13). *Adelaide City Council baulks at proposal to build high school on parklands*. ABC NEWS. Retrieved from: https://www.abc.net.au/news/2016-08-13/adelaide-city-council-baulks-at-parklands-high-school-proposal/7731668

City of Sydney (2018, August 13). *Alexandria Park Community School and Inner Sydney High School - Heads of Agreement with the Department of Education for Joint Use Facilities*, Retrieved from: https://meetings.cityofsydney.nsw.gov.au/documents

Cook, H. (2017, February 21). *Richmond's $43m, really high school gets off the ground, aims to be open by 2018*. The Age. Retrieved from: https://www.theage.com.au/national/victoria/richmonds-43m-really-high-school-gets-off-the-ground-aims-to-be-open-by-2018-20170221-guhw8p.html

Kweon B.S., Naderi, J.R., Ellis, C., Shin W.H. & Danies B. (2017). *Using Simulated Pedestrian Environments to Study Walking Behaviours*. 2017 CELA proceedings. Retrieved from: https://thecela.org/wp-content/uploads/CELA-2017-Conference-Proceedings_Final-1.pdf

Larsen, K., Gilliland, J., Hess, P., Tucker, P., Irwin, J., & He, M. (2009). *The influence of the physical environment and sociodemographic characteristics on children's mode of travel to and from school*. American Journal of Public Health, 99(3), 520-526. doi: https://doi.org/10.2105/AJPH.2008.135319

McDonald N.C. & Aalborg A.E. (2009). *Why Parents Drive Children to School: Implications for Safe Routes to School Programs*, Journal of the American Planning Association, 75(3), 331-342. doi: https://doi.org/10.1080/01944360902988794

NSW School Infrastructure (October 2017). *Environmental Impact Statement*. Retrieved from: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-7503%2120190227T232540.809%20GMT

Oliver, M., Mavoa, S., Badland, H., Parker, K., Donovan, P., Kearns, R. A., Lin, E.Y. & Witten, K. (2015). *Associations between the neighbourhood built environment and out of school physical activity and active travel: an examination from the Kids in the City study*. Health & Place, 36, 57-64. doi: https://doi.org/10.1016/j.healthplace.2015.09.005

Rosenberg, D., Ding, D., Sallis, J. F., Kerr, J., Norman, G. J., Durant, N., Harris, K. & Saelens, B. E. (2009). *Neighbourhood Environment Walkability Scale for Youth (NEWS-Y): reliability and relationship with physical activity*. Preventive medicine, 49(2-3), 213-218. doi: https://doi.org/10.1016/j.ypmed.2009.07.011

Singhal, P. (2017, November 2). *Design for new high-rise Ultimo Public School revealed*. The Sydney Morning Herald. Retrieved from: https://www.smh.com.au/education/design-for-new-highrise-ultimo-public-school-revealed-20171102-gzdhi7.html

Singhal, P. (2018, August 13). S*ydney's high-rise schools to get exclusive access to popular parks*. The Sydney Morning Herald. Retrieved from: https://www.smh.com.au/education/sydney-s-high-rise-schools-to-get-exclusive-access-to-popular-parks-20180813-p4zx7t.html

Stokols, D. (1992). *Establishing and maintaining healthy environments: toward a social ecology of health promotion*. American psychologist, 47(1), 6. doi: https://doi.org/10.1037/0003-066X.47.1.6

Swinburn, A. (2017). *Vertical School Design: Strategising the spatial configuration of a multi-storey typology to facilitate education in dense city environments*. Byera Hadley Travelling Scholarships Journal Series. Retrieved from: https://www.architects.nsw.gov.au/download/Vertical%20School%20Design_AdamSwinburn.pdf

Taylor, A., Wiley, A., Kuo, F., & Sullivan, W. (1998). *Growing Up in the Inner City: Green Spaces as Places to Grow*. Environment and Behavior, 30(1), 3-27, doi: https://doi.org/10.1177/0013916598301001

Victoria State Government Education and Training. (2018, October 14). *Waivers of outdoor space requirements for centre-based services located in the Melbourne Central Business District (CBD)*. Retrieved from: https://www.education.vic.gov.au/childhood/providers/regulation/Pages/waiversoutdoor.aspx

Victorian School Building Authority. (n.d.). *South Melbourne Public School*. Retrieved from: https://www.schoolbuildings.vic.gov.au/schools/Pages/SouthMelbournePrimarySchool.aspx

Vukovic, R. (2018, April 11). *Designing a vertical school. Teacher Evidence + Insight + Action*. Retrieved from: https://www.teachermagazine.com.au/articles/designing-a-vertical-school



Altona Early Years Hub.
Architecture by Brand Architects.

PART 2

CONNECTING WITH THE EARLY YEARS

https://doi.org/ 10.26188/13290455

CALVARY COMMUNITY HUB: CONCEPT DESIGNS IN RESPONSE TO THE NEEDS OF A THRIVING COMMUNITY HUB

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[2] Peter Moeck Architect, Wayville, South Australia

Abstract

The Calvary Community comprises Calvary Lutheran Primary School, Calvary Lutheran Church, Calvary Kindergarten, Noarlunga Children's Centre, an Opportunity Shop, Men's Shed, and Emergency Housing in Morphett Vale, South Australia. This paper outlines how 'Family Zone', a model that aims to bring together a range of support programs to break a generational cycle of marginalisation, will be adopted to create a thriving Calvary Community Hub. This parenting program developed by Lutheran Community Care focuses on family wellbeing by providing access to needs-based professional and volunteer assistance. Building trust and rapport is the key to long term relationship change and improved lifelong outcomes. The existing co-location can be enhanced by developing a common vision and purpose. Overcoming operational barriers and sharing resources is a challenge. A collaborative and cooperative approach can deliver on the aspirations articulated in this paper. Architectural concept designs developed in response to the needs of a thriving Calvary Community Hub are provided.

Keywords: family wellbeing, improved lifelong outcomes

Calvary Community Hub:

Concept Designs in Response to the Needs of a Thriving Community Hub

In 2019 Calvary Lutheran Primary School embarked on a journey of assisting families to build their social and emotional capacity and become interdependent. Some of the families associated with the Calvary community linger in a cycle of abuse, poverty and hopelessness and find it challenging to bring about change in their own lives. Calvary Family Zone is an opportunity to improve connections with school and community by providing a stepping-stone for families. This is a place and service that can bridge the gap between school and government agencies such as the Department for Child Protection (DCP) and Child and Adolescent Mental Health Services (CAMHS).

The goal of this program is for families to stay connected with the Calvary community even after their children have graduated. The provision of settings that facilitate connection with others in a safe and non-judgemental environment has the potential to significantly reduce the impact of adverse childhood experiences resulting from childhood trauma. The objective of Calvary Family Zone within a school setting is to increase the likelihood of children being able to regularly and actively engage in their learning and to build their capacity for improved lifelong outcomes. This paper identifies the aims, describes the strategic intent, illustrates the design concept and lists the key challenges associated with developing the Calvary Community Hub.

Background and Key Aims

Reducing the impact of childhood stress is a key aim of the Calvary Family Zone. There is evidence that childhood stress can change neural systems and that this lasts a lifetime (Burke Harris, 2018). Timely interventions can help retrain the brain and body, foster resilience and help children, families and adults live healthier and happier lives. Children are especially sensitive to trauma because their brains and bodies are developing. A large and growing body of research indicates that toxic stress during childhood can harm the most basic levels of the nervous, endocrine and immune systems and that such exposure can even alter the physical structure of DNA (Mercy & Houly, 2019). Some children and families attending Calvary Lutheran Primary School have been exposed to physical, sexual and emotional abuse and neglect, growing up in a household where a parent is mentally ill and/or substance dependent. If we work to address the impact of adverse childhood experiences in both adults and children, then we have an opportunity to support change in the short and long term. Our focus is to support adults to build capacity, to identify their own trauma, to support them to manage their lives and by implication, reduce the negative influences on their children.

Children do not focus and engage with learning if they are distracted by social and emotional concerns. Conventional academic curricula are focused almost entirely on the world around us and pay little attention to the inner world. We see the results of that every day in boredom, disengagement,

stress, bullying, anxiety, depression and dropping out. These are human issues, and they call for human responses (Robinson, 2015). Parents and teachers have the greatest influence on a child. The power of positive teacher-student relationships is critical for learning to occur. It is not so much the structure of the family but rather the beliefs and expectations of the adults in the home that contribute most to achievement (Hattie, 2009). A significant impact on student well-being and the ability to attend to learning would increase if we could positively influence social and emotional issues.

We can support change by offering a place within the school setting and community where families feel closely connected. We envisage facilitating access to supporting agencies and professionals who can provide financial counselling, speech therapy, behaviour counselling, parenting groups, fitness classes, playgroup, food preparation sessions and early intervention programs for parents and children such as the 'Circle of Security' course. Associated help includes supporting children learning from home, homework club, breakfast club and providing healthy lunches.

Strategic Intent

According to the Calvary Lutheran Primary School (CPLS) Strategic Intent (2020), CPLS aims to prepare all students to be able to 'reach for success' in relationships, engagement and achievement, with Christ-centred holistic learning. The school's strategy is organised as four pillars; learning, wellbeing, high quality teaching and an eco-system of partnerships. Calvary Family Zone connects an eco-system of partnerships by forming supportive networks and collaborations. Partnerships with allied health and external professionals are expected to support our goal to build a strong and thriving Community Hub. The pillars are aligned with, and support, the achievement of our school 'REACH' philosophy of connecting and serving others within a safe, inclusive and supportive community. They are also synergistic with the vocational practices outlined in the 'Growing Deep Leadership and Formation Framework' (Lutheran Education Australia, 2016) which comprise excellence in learning, ongoing improvement and innovation strengthening Lutheran identity, community building and leading effective organisation and management.

Schools are funded to deliver education and an education system is all about learning. Effective learning occurs within a network, security, context, connection and sense of belonging. What happens outside school is manifest in a student's social and emotional behaviour and this hinders learning. Transition for parents and caregivers is as important as transition for students and needs to be part of the school culture.

The Vision

The vision for the Calvary Community Hub is to create a community of support networks where families and individuals are able to develop their skills in a range of areas. Capacity and skills development can help reduce the likelihood of making poor choices that result in family members being placed in the care of the government agencies they are trying to avoid. Creating and sustaining safe, stable, nurturing

relationships and environments for all children and families can prevent adverse childhood experiences and help all children reach their full health and life potential (Mercy & Houly 2019). By providing support and opportunities for growth through rich community connection, we also hope to create a culture of 'pay it forward' where families go on to contribute to Calvary Family Zone through volunteering and supporting others. Growing capacity in our young people and families and strengthening life skills, resilience and discernment can assist in developing communities of hope.

The school has created a new job description called the 'Calvary Family Zone Connector'. The role of the connector is to find and leverage existing local programs, resources and services. Calvary Lutheran Church provides a venue for a breakfast club, professional sharing and debriefing, food hampers through the Community Care Pantry, Thursday Community Lunches and the provision of take home meals when requested. Lutheran Community Care provides counselling services, parent education and workshops and the opportunity to provide placements for students studying counselling. The City of Onkaparinga offers a range of services and initiatives as part of Community Development and Healthier Cities. The local Community Garden across the road from the campus and Foodbank SA, OzHarvest and The Food Embassy all connect community through food.

One of the recent success stories is the Foodbank Fresh Food Fridays Program. Twenty food hampers are delivered to school each week. These are discretely distributed 'on the way home' to students of families who will not have food equity for the weekend. Sharing and caring in a tangible and practical manner develops and deepens trust and connections with people and community.

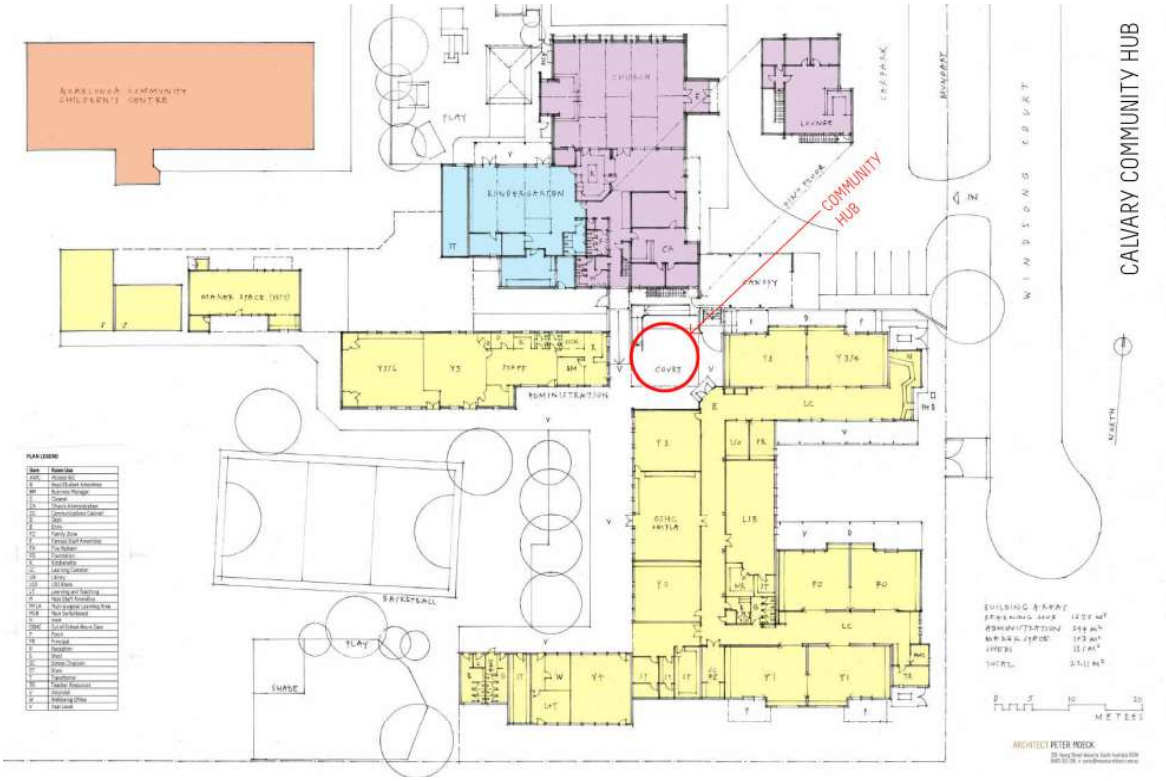
The Design Concept

The concept is to locate Calvary Family Zone at the heart of the campus rather than within an isolated re-purposed room. This is a move towards a welcoming single front door model of multi-service delivery in a school setting and central to the philosophy that underpins this initiative. The appended architectural drawings illustrate the proposal to infill an existing courtyard and link buildings that accommodate administrative and learning hub functions. The footprint of new and altered floor area is modest (see Fig. 1 to 6). The intent is to provide a welcoming, informal and safe place. The central space is configured as a circle to warmly embrace the users of the space within a restful backdrop of lush garden and green wall. Areas can be open or segregated to suit a range of user groups and programs using curtains and glazed sliding doors for visual and acoustic privacy. Secure and monitored entry to the school is maintained with electronic locking and visual supervision from the school's administration team. New automated sliding doors are used at two secured entries.

The design intent is to provide a comfortable environment that uplifts the human spirit. This will be achieved with informal loose furnishings, raised ceilings, generous daylight provision and a place to access decent coffee and tea. The radiating timber strips on the ceilings connect with the perimeter

Figure 1

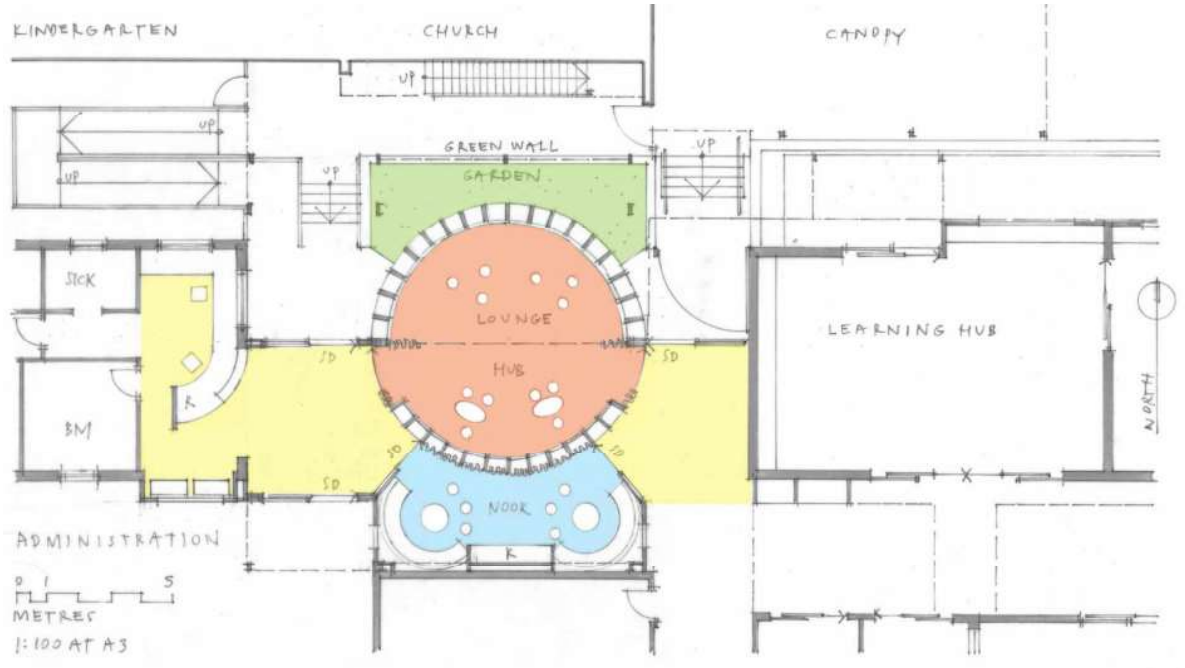
Calvary Community Hub: Site Plan



Source: Peter Moeck Architect

Figure 2

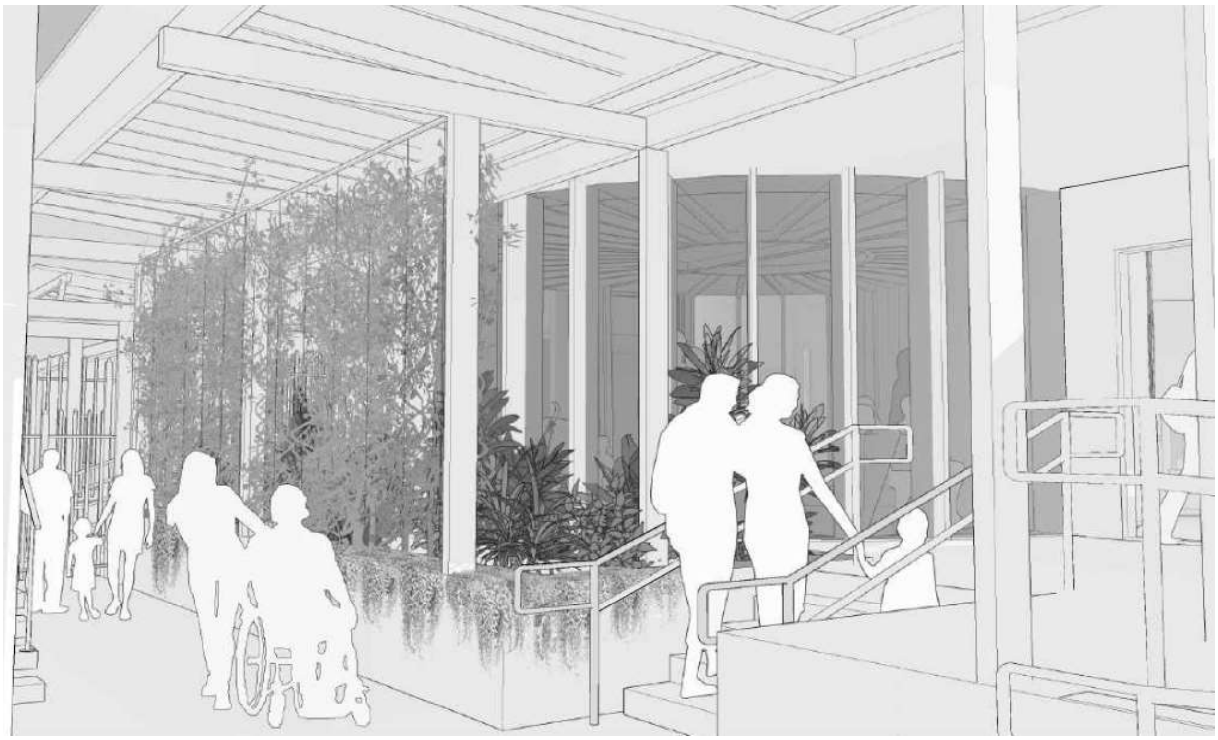
Calvary Community Hub: Proposed Concept Design `



Source: Peter Moeck Architect

Figure 3

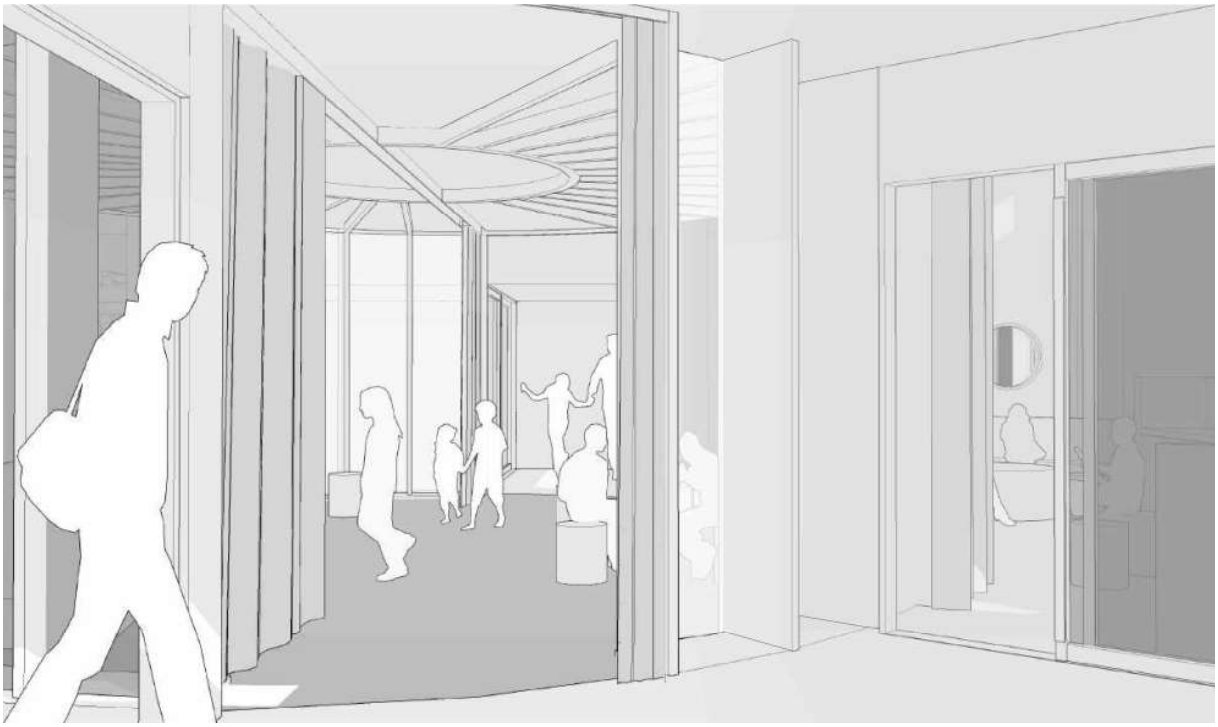
Calvary Community Hub: Garden Forecourt



Source: Peter Moeck Architect

Figure 4

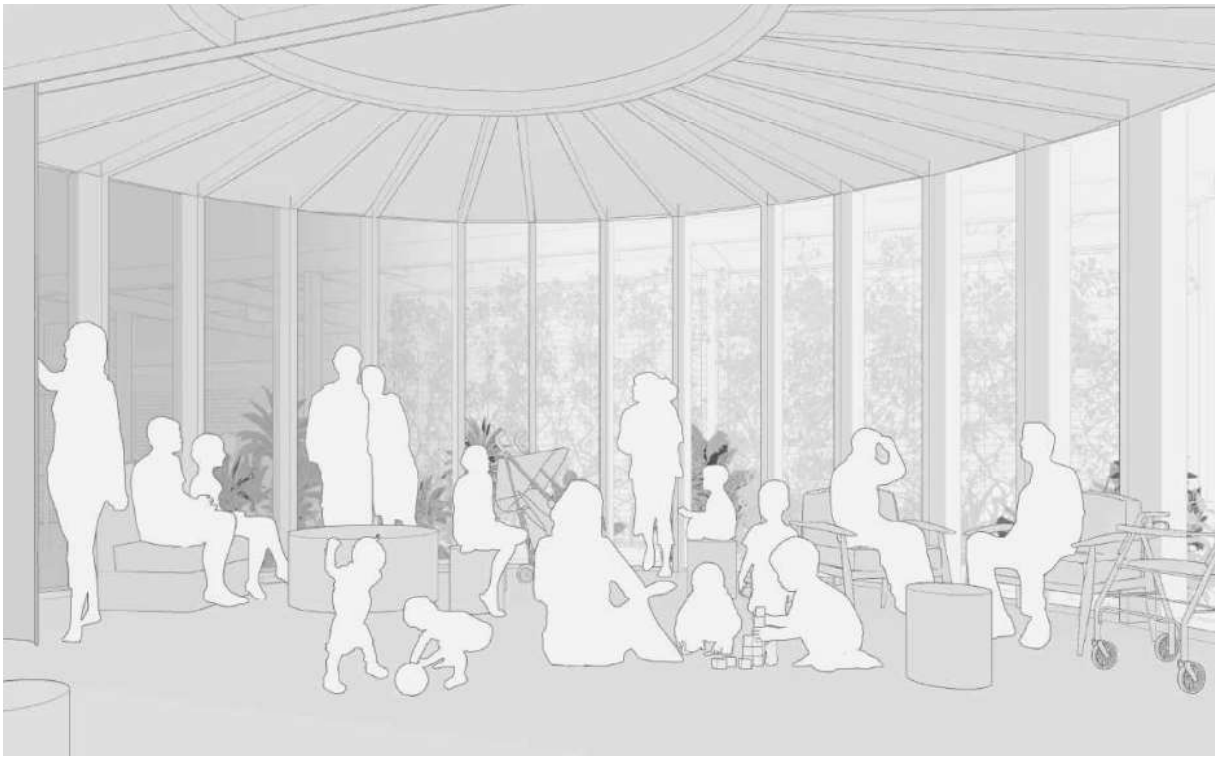
Calvary Community Hub: West Entry View to Hub and Nook



Source: Peter Moeck Architect

Figure 5

Calvary Community Hub: Lounge View to Garden



Source: Peter Moeck Architect

Figure 6

Calvary Community Hub: Entry View to Hub and Lounge



Source: Peter Moeck Architect

structural fins that define the circle reflecting a sunshine theme that represents hope for the future. This informal environment is visually and physically connected to the administration functions and set within a north facing garden setting. The Community Hub is strategically placed and accessible at the heart of the campus and the role of the Calvary Family Zone Connector will be placed front and centre.

The Challenges

There are two challenges facing the development of the Family Zone at Calvary. The first challenge is that the co-located organisations are currently working autonomously with limited connectivity to each other. It is important to address this challenge because there are many opportunities to share and collaborate for community benefit. Evidence lends support to locating place-based initiatives in places already connected with the local community such as schools (Brettig, 2020). The co-located model can thrive and flourish in an arrangement where there are positive attitudes regarding community mission and the aspirations to uplift and bring stability to families in crisis and in need. This will also share the load and can reduce the financial and volunteer strain on the church as an autonomous service provider.

The second challenge is to develop co-ownership of the vision and approach. Whilst families have historically demonstrated reluctance to attend support evenings such as parenting sessions and information evenings, strategies that are being considered to develop co-ownership include the sharing of stories that demonstrate successful connection, cooperation and collaboration because 'word of mouth' referrals are a sustainable marketing strategy.

The next step is to secure funding from the SA Independent Schools Block Grant Authority to make the design concepts a reality. We are aiming to build in 2023.

References

Brettig, K. (2020). *Building Stronger Communities with Children and Families (2nd ed.)*. Cambridge Scholars Publishing.

Burke Harris, N. (2018). *The Deepest Well: Healing the Long-Term Effects of Childhood Adversity.* Simon and Schuster.

Hattie, J. A. C. (2009). *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.

Lutheran Education Australia (2016). *Growing Deep Leadership and Formational Framework*. Adelaide, South Australia

Mercy, J. A., & Houry, D. E. (2019). *Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence*. Centre for Disease Control and Prevention.

Robinson, K. & Aronica, L. (2016). *Creative Schools: Revolutionizing Education from the Ground U*p. Penguin Random House.

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THE FAMILY ZONE: A SCHOOL-BASED MULTI-PARTNERSHIP APPROACH TO CHILD AND FAMILY WELLBEING

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Abstract

Schools can be vitally important centres of family safety and wellbeing, as evidenced by the Family Zone managed by Lutheran Community Care at Ingle Farm Primary School in northern Adelaide. The co-location of the Family Zone occurred through a lease agreement with the SA Minister of Education, works in close affiliation with school leadership, and is funded through Commonwealth, state, philanthropic and local donor sources. The Family Zone sustains access to health, family wellbeing and child protection services alongside the school and a co-located state-funded Children's Centre. This arrangement offers a case study of a particular model of schools as community hubs. The community benefit of the Family Zone prompts suggestions for policy development to optimise the re-utilisation of existing school facilities and the design and provision of new school-based resources to achieve enhanced community connections and wellbeing.

Keywords: Family Zone, family wellbeing, connection, partnerships, re-utilisation, policy

The Family Zone: A School based Multi-Partnership Approach to Child and Family Wellbeing

Schools in Australia are increasingly called upon to support families in diverse ways that exceed their original core purpose of education. In regions experiencing complex socioeconomic disadvantage there is growing recognition that schools are key sites to connect with families that are otherwise difficult for mainstream services to reach. The South Australian Education Department's Schools as Community Hubs initiative has recognised the latent potential of schools as broader community resources (Department for Education and Child Development 2017), and the National Community Hubs Program delivered by Community Hubs Australia has explicitly identified schools as the key service locations for their Hub initiative, recognising the potential for this model to improve community awareness and connections for isolated families, and to support the school readiness, literacy and social confidence of children (Wong, Press and Cumming 2015; Rushton et al 2017).

Schools can become important centres of family safety and wellbeing, as evidenced by the Family Zone managed by Lutheran Community Care at Ingle Farm Primary School in northern Adelaide. The Family Zone is co-located with Ingle Farm Primary School through a lease agreement with the SA Minister of Education, works in close affiliation with school leadership, and is funded through Commonwealth, state, philanthropic and local donor sources. The Family Zone sustains access to health (WHO 1948), family wellbeing (AIHW 2015) and child protection services alongside the school and a co-located state-funded Children's Centre.

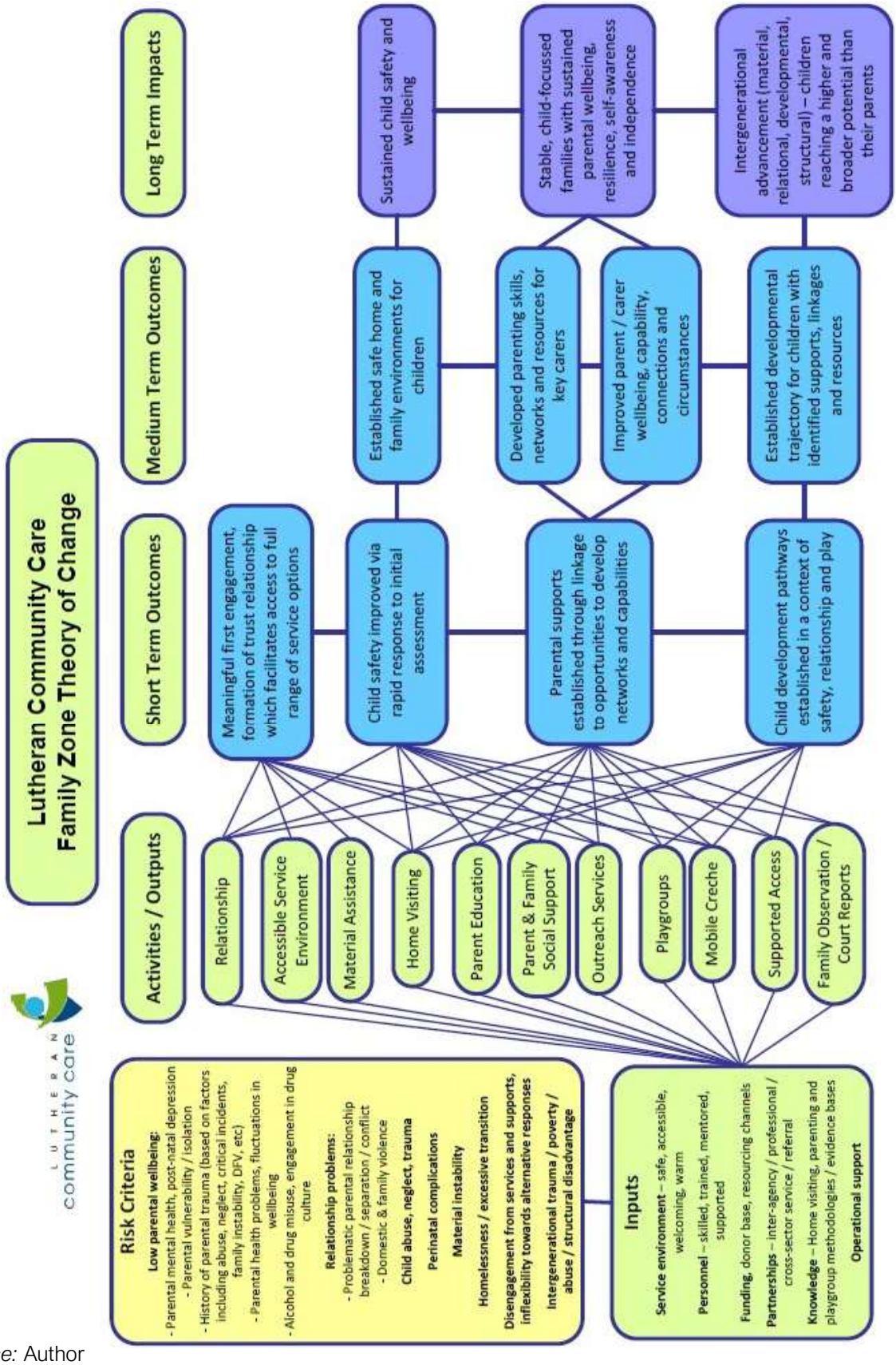
Family Zone Services

The hub-based service range of the Family Zone has developed over time in direct response to local family needs, with service direction governed by Lutheran Community Care in relationship with service partners and the school community. The objectives and outcomes of the Family Zone are expressed through an internally developed Theory of Change (see Figure 1). Theories of change are defined by Mayne (2015) as '(m)odels for depicting how interventions are meant to work'.

The Family Zone responds to compromised parental wellbeing, supporting parents with limited capability, encouraging parents with low levels of child focus, or supporting families through relationship breakdowns. Referrals from the Department of Child Protection and the Family Court are frequent and are most often focused on the needs and requirements of parents. The Family Zone must therefore navigate a system that is seeking the compliance of adults and the achievement of outcomes by and for adults, in order to reach the children involved. Providing services and supports to for parents while ultimately having the best interests of their children in mind requires continual care to maintain the engagement of parents. At times, there can be clashes with the objectives and priorities of referring parties; however, the accessibility of the Family Zone and the growing need for services of this nature in the community means that referrals are not likely to be compromised by the persistence of a child-focused approach.

Figure 1

Family Zone Theory of Change



Source: Author

The longstanding lease arrangement with the Department of Education has allowed the Family Zone to take a long-term and holistic approach to complex problems. This means that, in some cases, significant improvements in family circumstances, parental behaviours and attitudes, and child wellbeing have been attained. For some families a short term, targeted programmatic intervention cannot address longstanding and overlapping risk factors.

The Challenge of Explaining Change

A drawback of this approach is that it is very difficult to measure the impact of the service using standard program performance measurement tools. Due to the highly integrated nature of service delivery, where families may be linked into several programs including home visiting, parent education, social support and playgroups alongside compulsory activities related to the Department of Child Protection or the Family Court, it is difficult to describe the processes at work, much less evaluate them. It has been considered that a whole of service impact evaluation exercise, incorporating interviews with families and young people who have had long-term involvement in the Family Zone service environment, would provide a reasonable picture of the factors involved in change for families and individuals via contact with the service over time. The benefits in terms of explanation to key stakeholders, including government, funders and referring parties, means that it is worthwhile considering an activity of this nature in the future. However, this would be a costly and time-consuming exercise.

Attempts have been made to link the outcomes of the Family Zone to the program theory of Funnell and Rogers (2011) as it pertains to complex service environments. Their work refers to the pre-eminence of emergent factors, flexibility and adaptability in complex service work. Rather than people's needs and service responses following a clearly defined, predictable and formulaic pattern, the planning and delivery of services is maintained in an emergent and adaptive state. This method of working requires the dropping of assumptions about individual and family backgrounds, conditions and potentials, and is intrinsically client-centred as a result.

As per the work of Tim Moore (2016; 2018) on evidence-informed practice, the achievement of values' alignment with participating families is an essential step in acceptance of services and of progress towards positive outcomes. Research in this area is now being adopted by the SA Early Intervention Research Directorate as a framework for facilitating systemic change of the state's child protection system (Early Intervention Research Directorate 2019). Values alignment requires deep listening and flexibility on the part of the Family Zone team. It also requires an acceptance that for optimal engagement with families, adopting the goals identified by the family as initial goals for achievement is necessary. Skill is required to achieve values alignment in this service context, not only in terms of the people skills involved in empowering disadvantaged and often traumatised families to take the lead in their own development, but also because it is often the case that families have been referred to the Family Zone by agencies with a

specific agenda for change. In all of this complexity, it is the creation of a safe and welcoming environment and the development of relationship – with families, parents, children, and referring parties from child protection and the Family Court – which creates a medium for this work to occur.

The Family Zone has developed a client-centred and holistic approach intuitively over more than ten years of practice, and it is only now that emerging theory (Moore 2018; Moore 2016; Mitchell 2014; Cook and Miller 2012) supporting these approaches is being linked to the established practices within the service. It is important to continue this effort in order to validate the work that occurs and to develop efficient platforms for communicating the complexity involved in these intensive and longitudinal transactions.

School Space Utilisation and Intersection with the School Environment

Provision of indoor and outdoor areas through the lease agreement with the SA Education Department has enabled spaces for welcome, offices, meetings, service delivery, health and therapeutic consultations, storage, and play. Areas within the lease agreement have changed and developed over time in response to the needs of service recipients and staff. Access to services by the general community on school grounds is managed by Family Zone staff in close communication with school leadership.

The use of school space by the Family Zone has been highly adaptive. As evidenced by the service's theory of change, a broad range of services and activities have evolved to meet the needs of diverse families. The intersection of the Family Zone with the broader school environment displays some interesting dynamics. The Family Zone environment has been recognised by some school students as a safe drop-in space, which creates opportunities for relationship building with these children, and in some cases, with their family. The school has recognised that the Family Zone can serve as a space for students to calm down where behaviours are spiralling out of control, and the space is sometimes used to support students to remain at school and avoid suspension.

Partnerships

Partnerships are a key aspect of providing a service of this nature. As mentioned above, the partnership with the Department of Education and with the school leadership at Ingle Farm Primary School are fundamentally important for providing a base of operations and a direct link into the local community. The Department of Child Protection and the Family Court are currently the referring partners but there are hopes that this can develop into a more strategic relationship in future, since the goals of the parties involved are closely aligned.

The Family Zone has also been successful in securing partnerships with health services, allied health providers and mental health professionals in relation to providing broad health and therapeutic supports to families who have multiple and complex needs.

Comparative Approaches

It is noteworthy that approaches similar to the Family Zone have developed in other parts of SA and Australia. Fleurieu Families based in Victor Harbour operates an equivalent service, offering support to vulnerable and at-risk families in the form of home visiting, parent education, play groups and other child development activities, as well as being a pathway to other local mainstream services. Capital Region Community Services (formerly Belconnen Community Service) in Canberra, ACT is an interstate example offering a similar approach.

Conclusion

The Family Zone at Ingle Farm, developed and sustained for more than a decade through a complex array of partnerships and relationships, offers a case study of a particular model of schools as community hubs. The community benefit of the Family Zone prompts suggestions for policy development to optimise the re-utilisation of existing school facilities and the design and provision of new school-based resources to achieve enhanced community connections and wellbeing. The immediate challenge to overcome in this regard is the need for a well-defined impact evaluation statement which can explain and validate the value of this integrated, holistic and longitudinal approach to supporting families.

The relationship of the Family Zone to its school-based tenure has been a critical aspect in the service's success over the past decade and it is hoped that this partnership can continue for the benefit of families across northern Adelaide, for many decades to come. It would be valuable for a national audit of services of this nature to be undertaken, and to see how they interact and intersect with school environments. The future planning of school sites for family and community wellbeing would benefit from this effort.

References

Australian Institute of Health and Welfare (2015). *Australia's welfare 2015, Australia's welfare series no. 12*. Cat. no. AUS 189. Canberra: AIHW

Cook, A. and Miller, E. (2012). *Personal Outcomes Approach: Practical Guide,* Edinburgh: Joint Improvement Team

Department for Education and Child Development (2017). *Schools as Community Hubs: A practical guide for schools and pre-schools*, Adelaide: Government of South Australia

Early Intervention Research Directorate (2019). *Summary Report of Research Findings*, Adelaide: Department of Human Services

Funnell, S.C. and Rogers, P.J. (2011). *Purposeful Program Theory*, San Francisco: Jossey-Bass/Wiley

Mayne, J. (2015). *Useful Theory of Change Models*, Canadian Journal of Program Evaluation, 30(2), 119-142

Mitchell, P. (2014). *Common practice elements for child and family services: A discussion paper*, Melbourne: Berry Street Childhood Institute

Moore, T. (2018). *Strengthening Evidence-Use In Practice: An Evidence-Informed Decision-Making Framework*, Melbourne: Berry Street Childhood Institute

Moore, T.G. (2016). T*owards a model of evidence-informed decision-making and service delivery*, CCCH Working paper No. 5. Parkville, Victoria: Centre for Community Child Health, Murdoch Children's Research Institute.

Rushton, S., Fry, R., Moore, T., Arefadib, N. and West, S. (2017). *Exploring the impact of Community Hubs on school readiness: Full Report*, Parkville, Vic: Centre for Community Child Health, Murdoch Children's Research Institute

Sanjeevan, S., McDonald, M. and Moore, T. (2012). *Primary schools as community hubs: A review of the literature*, Parkville, Vic: Centre for Community Child Health, Murdoch Children's Research Institute

Wong, S., Press, F., and Cumming, T. (2015). *Report on the pilot evaluation of the National Community Hubs Program*, Scanlon Foundation / Refuge of Hope: Melbourne.

World Health Organization. (n.d.). *Frequently asked questions*. Retrieved from http://www.who.int/suggestions/faq/en/

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OUR PLACE: OPENING THE SCHOOL GATES TO THE COMMUNITY

Alexandra Fraser[1] and Margaret Rutherford[1]

[1] Our Place
Author Note : Our Place is an initiative of the Colman Education Foundation working in partnership with the Victorian Government, led by the Department of Education and Training.

Abstract

The built environment plays an important role in the *Our Place* approach to improving outcomes for children, families and communities. Our Place is a holistic place-based approach to supporting the education, health and development of all children and families in disadvantaged communities. It utilises the universal platform of a school. Single, shared entrances in Our Place sites are a key feature of the approach. This entails a deliberate attempt to change the way schools are used by communities and the way services and supports are offered to vulnerable families. The expansion of the Our Place approach from one site to ten schools across the state has brought about many barriers to implementing the ideal entrance concept. This is due to the diverse nature of the communities and the differences in the level of influence over building design and construction. In the absence of a formal evaluation of the single, shared entrance concept, this paper will explore emerging themes around scaling up the Our Place outcomes focused, place-based initiative utilising schools as a universal platform.

Keywords: place-based, outcomes focused, scaling up, schools as hubs, community approach

Our Place: Opening the School Gates to the Community

Our Place is a holistic place-based approach to supporting the education, health and development of all children and families in disadvantaged communities by utilising the universal platform of a school. An initiative of the Colman Foundation, Our Place works in partnership with the Victorian Government led by the Department of Education and Training (DET). The approach is being employed in ten schools across the state to improve outcomes for children and families in disadvantaged communities. The Our Place initiative has philanthropic funding for ten years in each of its sites. Our Place evolved over eight years from the experiences at Doveton College, located in the outer south-east Melbourne suburb of Doveton. Having opened in 2012, Doveton College operates as a family-centred universal platform providing an integrated model of education and community support for families in an area experiencing significant disadvantage.

The *Our Place* approach includes five elements or evidence-based strategies that contribute to achieving desired outcomes: high-quality early learning, health and development; high-quality schooling; wrap-around health and wellbeing services; engagement and enrichment activities for children; and adult engagement, volunteering, learning and employment.

The role of schools in Our Place

Our Place schools not only support children to achieve their education potential, they also have partnerships in place to provide families access to a range of onsite resources and services offering additional support to ensure children are ready and able to learn effectively. Research suggests that children experiencing social and economic disadvantage may require greater levels of support. With parents and guardians more engaged and involved at the school, including through learning opportunities of their own, the school becomes a community learning centre rather than a place that separates children from the world of adults and the wider community (Edgar, 2001).

Utilising schools as a universal platform to support disadvantaged communities can result in powerful change. When implemented with strong engagement of local community leaders and service providers, schools can offer services and support at the place where children and families come every day. They use a highly accessible, non-stigmatising universal platform to build relationships, identify needs and aspirations, and reduce barriers to accessing support, and they build on the aspirations all families have for their children to learn and succeed (Moore et al., 2017; Sanjeevan, McDonald & Moore, 2012).

The single, shared entrance as a key feature of Our Place

A key feature of the Our Place approach is having a single, shared entrance to a combined, purpose-built school, early learning centre and family support space, with community spaces and a welcoming reception (Figures 1). The single, shared entrance physically opens up the school and early years' centre to the local community allowing stigma-free access to additional services and opportunities (Figure 2). This is particularly important for vulnerable families who consistently report barriers to

Figure 1

Example of an Our Place single, single shared entrance shown in architectural plans



Source: Our Place

Figure 2

Example of an Our Place welcoming environment



Source: Our Place

accessing and engaging with services (Moore et al., 2014; Valentine and Hilferty, 2012; Yule, 2015).

The Our Place approach is based on learnings from a range of international and Australian models, including Toronto First Duty in Canada, the Elizabeth Centre in the United States and Sure Start in the United Kingdom. While not an entirely new concept, having as a key feature a single, shared entrance to a range of supports and services located on a school site is unique.

Our Place works with the Victorian Schools Building Authority (VSBA) and their appointed architects in the design phase to ensure the entrance is welcoming for families, while providing a clear entry point to the range of services and supports on offer on site. Our Place sites typically offer the provision of early learning from birth, as well as playgroups, child health care and parenting support, health and wellbeing support services, including allied health and general practitioners. A single entrance means that families can be easily directed to the supports they need in a seamless and transparent manner, where agencies work as one to deliver support in a coordinated approach.

The single, shared entrance provides opportunities for families and service providers to meet informally and casually interact. Staff located at entrances aim to be non-judgmental and welcoming so that families have seamless access to education and support. The aim is for a 'no wrong door' policy and a single storytelling experience with the school at the centre of the community. Our Place entrances aim to be safe, family-friendly, appealing spaces designed for adults to establish friendships, develop informal support networks and a sense of belonging. They are also where adults can access practical supports, including internet connectivity, brochures and job boards.

Doveton College – the *Our Place* demonstration site

As a greenfield site, Doveton College's single, shared entrance was specifically designed to support the community from the minute they walked in the door. After eight years of operation, Doveton College is now a fully operational community-focused site with many activities for children and their families. Programs for engaging adults are working particularly well, with on average more than 250 adults engaged and participating in community programs, education and volunteering each year.

While the effect of having a single, shared entrance at Doveton College has not been formally evaluated, a parent survey conducted by the Our Place Research and Evaluation team in 2018 (n=68) indicated that most felt welcome on school grounds, including the entrance. Over half (52 per cent) reported feeling 'very welcome' at the entrance, and 29 per cent 'extremely welcome'. Parent feedback highlighted the entrance provided a warm welcome underpinned by supportive staff: 'Staff always greet me and always seem willing and available to discuss my children.'

Most parents said they now felt more welcome at the school compared to when they first came (63 per cent), while 31 per cent felt about the same.

Interviews with parents involved in Doveton College since it opened highlighted how comfortable parents felt on site:

> From everything else that had been in Doveton it was brand new and looked a bit out of place. But when you walk through the doors and everyone was welcoming it was great. Right from the beginning. Within a couple of weeks, you'd walk through the door and you'd be greeted from the staff all the way through. It became like a second home.

Implementing the approach beyond Doveton

Unlike Doveton, which is a site operating under a single entity (the school), in other locations, Our Place and DET are working to create integrated facilities in both build and mindset. Building on the experiences of Doveton College, the approach is being implemented in ten communities throughout Victoria. Sites are selected based on a need to improve educational outcomes, quantifiable disadvantage, planned infrastructure works and local interest in integrated infrastructure and service delivery.

Our Place sites reflect a mix of metropolitan (Doveton, Bridgewood, Carlton, Frankston North, Westall) and regional (Robinvale, Northern Bay, Morwell, Seymour, Mooroopna) communities. Within the 10 communities there are 11 building sites (Frankston North includes two separate buildings). Most have a single, shared entrance built into their design, however, several are not in use yet for various reasons (Table 1). Three sites, including Doveton, are new buildings, while four are refurbished existing buildings, and two are a combination of both.

Table 1

Our Place sites

***Our Place* site**	**Build Year**	**Single, shared entrance**	**Site type**
Doveton	2012	Yes	New build
Bridgewood	2018	Yes - but not in use yet	New build
Carlton	2018	Yes - but not in use yet	Refurbishment
Robinvale	2018	No	Refurbishment
Northern Bay (Corio)	2019	Yes	Combination
Morwell	2019	Yes	Refurbishment
Seymour	2019	No	Refurbishment
Frankston North - Mahogany Rise & Aldrercourt	2020	Yes - but not in use yet	Combination
Mooroopna	2020	Yes - but not in use yet	New build
Westall	tbc	tbc	tbc

Note: Frankston North includes two separate site buildings but make up one Our Place 'community site'. Westall's build year, entrance and site type is yet to be confirmed.

Emerging themes

Involvement of Our Place in the design phase

In some cases, Our Place joined the partnership overseeing site design after the appointment of architects and design development. Ideally Our Place would be involved in the design and build phase of all its sites, contributing to ideas and discussions to ensure evidence-based elements are incorporated. At sites where Our Place has joined after the commencement of the design phase, emphasis is placed on exploring how a virtual single, shared entrance approach can operate in principle. In more recent builds the process of considering design features that enable activation of a single entrance and shared usage has been smoother. All parties involved, including Our Place, VSBA and DET, are familiar with undertaking such a consultative process.

The first site established after Doveton College, while not experiencing socioeconomic disadvantage, is within a new suburb facing significant growth with limited services. It was conceptualised by state and local government prior to Our Place involvement and designed to have one main entrance with a shared reception area for school, early years and health and wellbeing services; however, there are four entry points in total. Since opening in 2018, the main entrance has not been widely used because the front car park is incomplete, leaving it less prominent than other entrances. However, all entrances are clearly signed, and visitors can find their way to reception via a 'yellow brick road'.

Working within existing school structures

Adapting existing school sites for broader community use is challenging. The design of several sites is constrained by existing school structures, mostly due to a combination of cost and space. One is a vertical school located within a pocket of significant disadvantage in inner-city Melbourne. As an 'infill' site, the school is made of the same materials and built, similarly to the neighbouring government housing flats, with lots of imperfections. The existing external structure was kept and the interior refurbished, raising the primary school and converting the ground floor into sessional kindergarten and long day care spaces. The creation of two reception areas has hampered the desired level of integration. Ground floor services were activated in early 2020 and partners are working to address this.

Another site requiring a restructure of an existing building is located within a regional community. The build is a refit of an existing school that has experienced multiple restructures, namely the addition of an early years and administrative space and a community library. Given the existing infrastructure, a shared, single entrance was not possible. However, effort has been made to ensure the library is accessible to the broader community, and plans are underway to enhance the prominence of the new early years space and connect it physically through an 'alfresco' style external walkway.

Perceptions of safety and security

Perceptions of safety and security have arisen in some sites in response to the idea of opening up schools to adults, with some resistance to an open and shared entrance. Concern also emerged around non-school staff and community members being on site outside school opening hours. This was particularly the case for areas with low levels of perceived safety. In these sites, Our Place works with stakeholders to explore real and perceived risks and explore processes to ensure children, family and staff safety are a priority. This often involves exploring ways to address the perceived risks without needing to put in place a physical barrier that could prevent families from freely entering school grounds.

Resources to enable the shared, single entrance to work

The presence of a single, shared entrance alone does not guarantee the Our Place approach will work. Instead, the facilities and infrastructure, including the entrance, can encourage staff from different agencies to work together in welcoming and supporting families into a community focused school. Placing skilled and dedicated Our Place staff on the ground at each site forges connections between families, schools and the wider community, helping to support all partners.

At some sites, issues have arisen when deciding which partner agency would take responsibility for the main reception area. This important function includes being the 'front face' of the site, navigating services and ensuring families find the support they need. To address this, significant work to develop an understanding of the Our Place approach and build a strong partnership has been undertaken so that staff can compensate for the physical environment. By engaging in co-design supports such as playgroups, kindergarten to school transition strategies, and a strong focus on building awareness of each other's offerings and processes, families are able to receive appropriate connection and support regardless of the contact point.

Planning a single site with multiple partners

While Doveton was established as a single entity covering the early years, school and health and wellbeing services, subsequent Our Place sites require negotiation with a range of partners, all of whom work within different systems, layers of government and organisational requirements. The Our Place approach looks at the 'system' through the eyes of families and children and seeks to change approaches in place that are not working for families. This is challenging within a single organisation but takes on a new dimension when multiple players are involved (Dart, 2018). To assist with this, Our Place employs staff experienced in community engagement at each site whose primary responsibility is trust and relationship-building amongst partners and supporting them to work together towards a common goal.

A need for further evaluation

Research and evaluation are core components of the Our Place approach, aiming to document and examine both process and impact throughout the implementation process. Further evaluation of the

impact of the approach, including sites' designs, is needed. In order to promote the concept of schools as community centres and the benefit of single, shared entrances, evidence of the approach's benefits is required. Our Place intends to utilise the learnings captured from its ten sites to build evidence and understanding of the specific impact of the single, shared entrance concept.

Conclusions

In scaling up the Our Place approach to ten sites across Victoria, the importance of building design that enables a shared and welcoming entrance is key. While building design alone does not create a welcoming and safe entry space for families, it is made easier if it is there in a physical sense. The role of a family-centred mindset and practices to make the best use of the available physical environment come to the fore when the ideal built environment is unavailable.

References

Dart, J. (2018). *Place-based Evaluation Framework: A national guide for evaluation of place-based approaches in Australia.* Clear Horizon: Commissioned by the Queensland Government Department of Communities, Disability Services and Seniors (DCDSS) and the Australian Government Department of Social Services (DSS).

Edgar, D. (2001). *The Patchwork Nation: Rethinking Government*, Rebuilding Community. Sydney: HarperCollins.

Moore, T., Arefadib, N., Deery, A., Keyes, M. & West, S. (2017). *The First Thousand Days: An Evidence Paper.* Melbourne: Centre for Community Child Health, Murdoch Childrens Research Institute.

Moore, T., McHugh-Dillon, H., Bull, K., Fry, R., Laidlaw, B. & West, S. (2014). *The Evidence: What We Know About Place-Based Approaches to Support Children's Wellbeing*. Melbourne: Centre for Community Child Health, Murdoch Childrens' Research Institute.

Sanjeevan, S., McDonald, M. & Moore, T. (2012). *Primary schools as community hubs: A review of the literature*. Melbourne: Centre for Community Child Health, Murdoch Childrens Research Institute.

Valentine, K. & Hilferty, F. (2012). *Why Don't Multi-Agency Child Welfare Initiatives Deliver? A Counterpoint to Best Practice Literature*. Sydney: Social Policy Research Centre, University of New South Wales.

Yule, A. (2015). *Dropping of the Edge (DOTE) 2015: Key Findings*. Jesuit Social Services and Catholic Social Services Australia.



Bridgewood Primary School
Architecture by Clarke Hopkins Clarke. Photo by Rhiannon Slatter.

PART 3

PARTNERING FOR BETTER COMMUNITY OUTCOMES

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A 21ST CENTURY LEARNING HUB: A CASE STUDY OF A 'JOINT USE' SCHOOL AND COMMUNITY LEARNING FACILITY

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Abstract

This case study demonstrates a successful merging of previously separate community, school, cultural, health, wellbeing, and tertiary facilities within a new hub in the regional centre of Young, New south Wales (NSW). It describes the collaboration between state and local government, architects, educators and community representatives. It details the conception of the facility from within the community, the multiple stakeholders and policies involved and the architectural response to a complex brief, a fortuitous multilayered historical site, and a diverse cultural context. Australia wide, Governments are searching for more effective and efficient use of public infrastructure. Shared use of schools, whereby they are encouraged to make their facilities available for community use, is relatively common in the State of NSW. It is only recently that 'joint use' projects which involve significant investments by multiple parties have been promoted in that State. Joint use projects have the potential to open myriad learning opportunities for a community. For example, there are few places of public infrastructure that represent the learning culture and pulse of a school, or community, like a library. For communities, the information they contain, the events hosted, and the spaces for hire are intrinsically tied to the culture of the local community. In secondary schools, libraries remain at the heart of learning. They are places that students inevitably gravitate to as a space for collaborative project work, social interaction, meetings, and events. In regional towns, the roles of both are magnified. These library aspirations both complement and compete, while opening up opportunities for use of a wide variety of school learning facilities by the community and re-integrating school with the broader community.

Keywords: joint use, shared use, library, community hub, community learning facility, school and community partnerships, regional school hub

A 21st Century Learning Hub:

A Case Study of a 'Joint Use' School and Community Learning Facility

Hayball Architects collaborated with School Infrastructure NSW (SINSW), Young High School (YHS), Hilltops Council, State Libraries NSW, community service groups and community members of Hilltops Local Government Area to design a joint use Library and Community Learning Facility. The project demonstrates a successful merging of previously separate facilities to create a new community learning hub in the regional centre of Young, NSW.

Defining Terms

The terms 'community hub', 'shared use', and 'joint use' conjure up a variety of meanings for different people. For the term 'community hub', Clandfield (2010) proposes a 'five point continuum extending from the community use of schools to the fully integrated school-community relationship' to describe various types of community use of school facilities.

NSW Department of Education encourages schools to engage in 'shared use', or 'community use of school facilities …, [whereby] schools are encouraged to make their facilities available for use by the community' (NSW Department of Education, 2020). Shared use is where a school controls a facility on its grounds but allows related community use during out-of-school hours, or when a local Council controls a facility such as a park or swimming pool but allows schools to book the use of the facility. Shared use of school and community sports facilities and halls is relatively common in NSW and leads to more effective use of infrastructure.

In its School Assets Strategic Plan, School Infrastructure NSW (SINSW) (2017) states its intention to develop stronger partnerships and increased joint and shared use of school facilities. Joint use involves a school sharing and funding facilities with a community partner, such as managing a sports ground with a local council. SINSW defines 'joint use' as:

> … where the **department and other parties make significant investments (land and/or capital)** in new facilities, upgrading facilities or maintaining facilities. The asset is typically shared between the school and the other parties over an extended period of time, or the lifetime of the asset. These projects are voluntary and **intended to be of mutual benefit to all parties** (NSW Department of Education, Policy Library, 2020) [emphases added].

In line with its intention to develop stronger partnerships, SINSW (2018) has also promoted the notion of Schools as Community Hubs and identified four fundamental principles underpinning Schools as Community Hubs:

- Developing more socially cohesive societies.
- Re-connecting learning with life and enabling learning anywhere, anytime with anyone.
- The sensible, collaborative use of assets through joint use developments and partnerships.

- Increasing socio-economic benefit/value-add (SINSW, 2018).

Joint use facilities and community hubs as proposed by SINSW create the opportunity for NSW State Schools to develop as true two-way community hubs, with a fully integrated school-community relationship as per Clandfield's (2010) continuum. In the case of an existing school, such as YHS, this opportunity will necessarily be constrained by the need for refurbishment and the needs of the community.

In rural and regional areas there is a strongly held believe that schools are 'central to being a community' (Halsey, 2018). This belief is rarely imagined as a fully integrated school-community relationship. However, the belief does provide fertile ground to develop a true two-way community hub as will be seen in the case of YHS and the Hilltops community.

Vision and Guiding Parameters

Establishing alignment between all parties with regard to both the vision and the operational requirements is the greatest challenge in developing and implementing a joint use project. Without alignment to a shared vision a joint use project will not be sustainable. Fundamental steps in this project were establishing the shared vision and commitment to this vision, deriving the guiding design principles and understanding and integrating the various sets of policies, regulations and requirements of different government departments.

Opportunities, Synergies and Vision

The vision for the project, 'Supporting Whole of Life Learning for Hilltops' grew out of synergy between a number of YHS initiatives and needs identified by Hilltops Council and community members. Young Shire Council2 Cultural Infrastructure Masterplan (Young Shire Council, 2014) identified the following needs:

- A new community library
- A cultural precinct
- Facilities for the Arts–Community / Arts space(s).

In addition, the newly formed Hilltops Council wished to augment existing education provision and provide new opportunities and networked spaces for learning, including a Country Universities Centre (CUC). With the announcement of a new Library for YHS, the school saw the opportunity to support a number of key initiatives and infrastructure needs by integrating a number of learning facilities with the new library facility:

- Youth Health and Wellbeing Hub
- Wiradjuri Learning and Cultural Centre
- Multimedia and project-based learning spaces (Hayball, Consultation notes YHS, 2018).

From the outset, Young High School and Hilltops Council Community Library was born out of these shared community needs and conceived by all as a joint use facility for mutual benefit. In determining

mutual benefits, the team considered what would be a 'win-win' for all community groups i.e., what are the things that this community does not have, that the school might provide, and what are the things that this school does not have, that the community might provide.

Design Guidelines and Principles

The design was guided by a synthesis of principles from:

- SINSW Education Facilities Standards Guidelines (EFSG), General Education Principles (NSW Department of Education, Education Facilities Standards and Guidelines, 2020)
- People Places (State Library NSW, 2020)
- Universal Design Principles (Centre for Excellence in Universal Design, 2020)
- The UN Sustainable Development Goals (United Nations, 2020).

Project-specific Design Principles were developed with SINSW, Young High School, Hilltops Council and the Project Reference Group and addressed whole-of-life learning, building community, celebrating the arts and the community's multicultural nature, providing contemporary learning environments, respecting heritage, ensuring Economically Sustainable Development and embedding principles of Universal Design.

Realising the vision

Synergies between SINSW's four fundamental principles underpinning community hubs and the Business Case for the project, which was commissioned by Hilltops Council, demonstrated a positive benefit to cost ratio (BCR) for the development of a joint use library and community learning facility. How the key principles were given effect is described below.

Seamless access to a range of resources and learning spaces

As a result of stakeholder engagement and the scrutiny of the Project Reference Group, a schema for the joint use of library and learning spaces was developed (see Figure 1).

Maximising mutual benefit while minimising required area and budget–achieving more for less

By sharing areas, establishing a joint collection and developing a system of bookable-use of a variety of integrated facilities, the area schedule for the joint use facility demonstrated the efficiencies gained by joint use with the total area being reduced from the area required for separate facilities.

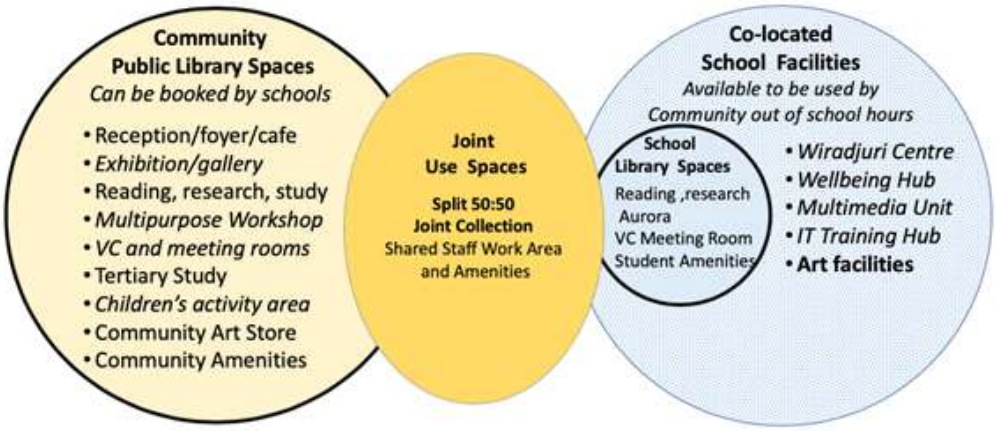
Connection to the Land, the Place and the People

Understanding the rich cultural history of the land on which the facility is located has been a key pillar in creating a joint use facility that gives effect to the guiding design principles. The facility will be located in Wiradjuri country (Figure 2).

In the 1860s the site and surrounds were the locations for the Lambing flat riots (Figure 3). False rumours that Chinese workers were planning to take local goldfields for themselves led to a series of riots on the site including the burning down of the original courthouse.

Figure 1

Integration of functional spaces including a joint collection and shared staff work area. Source: Hayball



Source: Hayball

Figure 2

Site Location Plan



Source: Hayball

Figure 3

Harvest of Endurance Scroll: A History of Chinese in Australia 1877-1988 illustrating the Lambing Flat Riots

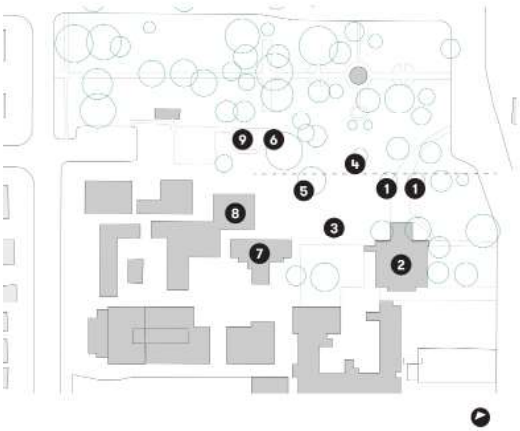


Source: https://www.nma.gov.au/explore/features/harvest-of-endurance

A new gaol was built (1876) on land adjacent to the current YHS site and a Grand Courthouse on the site of the current school (1884). Immediately to the north of the current site is an open civic area called Carrington Park. This used to be separated from the school site by Currawong Street, however this street was removed. The removal of Currawong Street resulted in the Grand Courthouse and the old gaol having an unusual direct frontage to Carrington Park (Figure 4).

Figure 4

Significant Existing Site Features





Source: Hayball

The preferred development site was selected based on its capacity to provide direct community access to and from the adjoining park and the fact that it would help reinstate visual and physical connection to the Grand Courthouse. The existing arts and amenities block, constructed in 1963 and located on part of the preferred development site, was considered intrusive from a heritage perspective. Synergistically, redevelopment of the school visual arts facilities within the new Library and Community Learning Facility added significant benefit to the community Arts groups who were seeking facilities and enabled the integration of sorely needed school multi-media facilities into the complex.

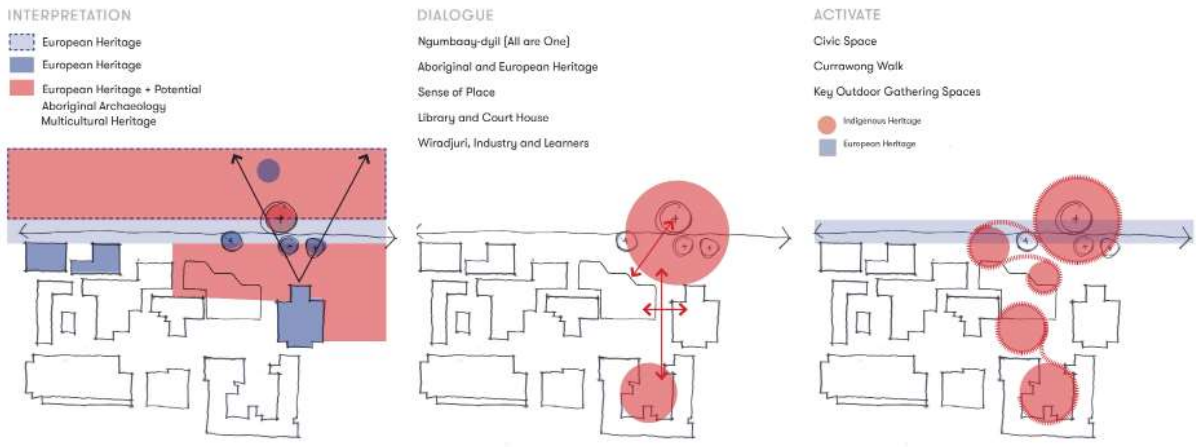
Building Community and Identity

To build community and identity and create a culture that reflects and respects diversity within the Hilltops' community, an extensive series of stakeholder workshops were conducted. Further, Architect Michael Mossman was engaged to assist the team to develop a design that responded to the cultural values and narratives of place. This process, involving consultations with local elders and visits to other cultural centres, led to a series of themes that resonate through the design. Heritage consultants (GML Heritage) were engaged to better understand how the heritage significance of the site could contribute to the development proposal.

Two complimentary narratives were developed to respond to the cultural aspiration of stakeholders and the historical context of the site. Historical mappings were overlaid with cultural considerations to create a response to both European and Aboriginal heritage which was based on interpretation, dialogue and activation. This approach is summarised in Figure 5.

Figure 5

Combined European and First Nations Heritage Response



Source: Hayball

Wiradjuri architectural narrative and response

Design responses to consultation with the Wiradjuri community included:

- *Yindyamarra* – a Wiradjuri word - respect for everything, expressed by giving honour, going slowly, and taking responsibility.
- *Ngumbaay-dyil* (all are one) – reconciliation and inclusion.
- *Songline narrative* – spaces for gathering, movement, connectivity and storytelling that meanders and interconnects the spaces.
- *Exchange* between the Wiradjuri and European (symbolised in Figure 6).
- *Language* – wayfinding and building naming in Wiradjuri language.
- *Cultural artefacts* referenced through façade material and detailing.
- *Fire* – spaces for coming together, storytelling and colours and materials to symbolise the significance of fire.

Consultation with stakeholders identified that places of significance within Aboriginal culture are not defined by linear elements, rather they are defined by and between a collection of nonlinear forms such as streams, mountains, rocks, vegetation, fire, the land and the sky. Stakeholders identified that the traditional approach to these places and circulation within them was also non-linear.

The *Songline* narrative shown meandering through the facility (see Figure 7) was developed in consultation with stakeholders to emphasise and celebrate the layers of Wiradjuri history and culture connected to this site. The forms of the facility and surrounding landscape elements are intentionally nonlinear and define a series of indoor and outdoor interstitial spaces for exchange, reconciliation and gathering. These interstitial spaces are places to emphasise *Ngumbaay-dyil* (meaning 'all are one' and 'all together are one') as a symbol of hope for the future. The *Songline* links these interstitial spaces enabling continuing dialogue between Wiradjuri and European Cultural Heritage. The path of the Songline welcomes a visitor at the entrance to Carrington Park and leads though multiple stops to tell a story of past and present from the Reconciliation Tree, past the Wiradjuri Centre, the Grand Court House, leading ultimately to new spaces in the school courtyard and Indigenous Garden.

Figure 6

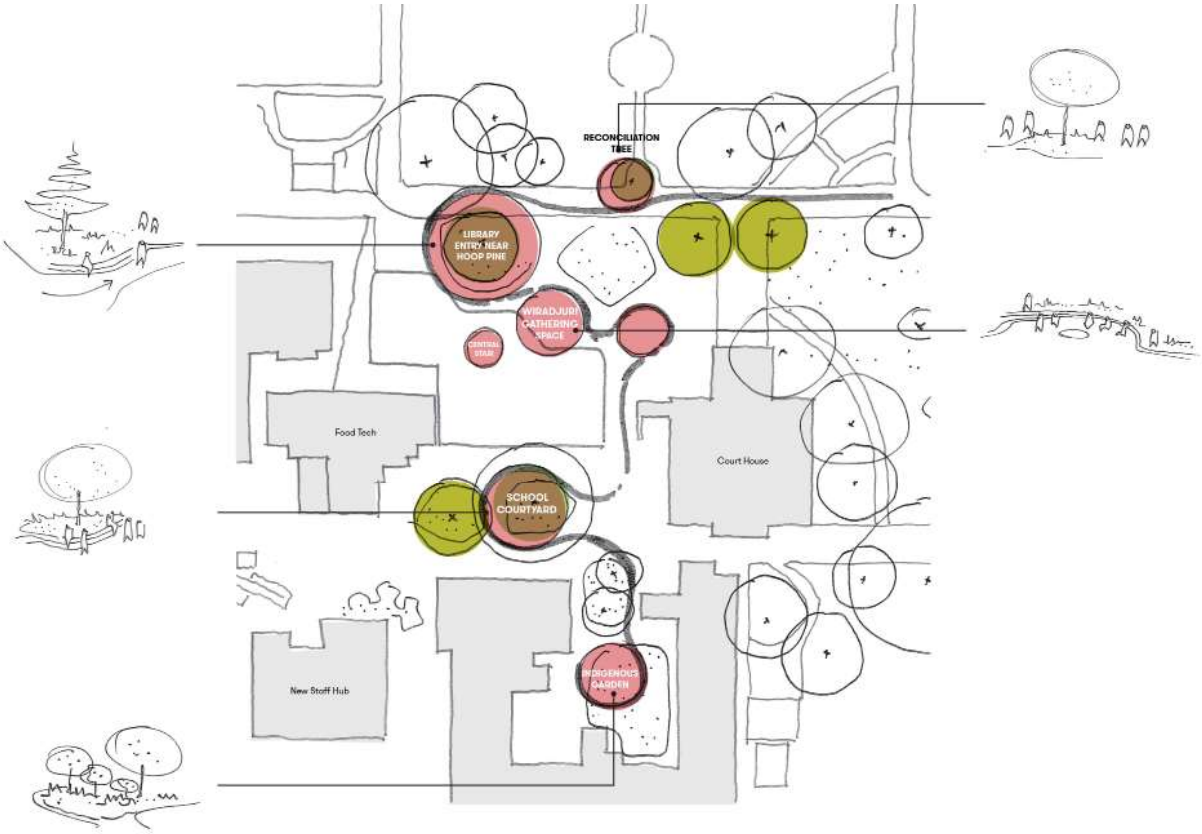
Exchange - gift presented to Coborn Jackey 'Chief of the Burrowmunditory'



Source: Hayball

Figure 7

The Songline Narrative



Source: Hayball

Archaeological findings uncovered on the site will be located along the Songline, providing opportunities for interpretation and learning. Findings to date, shown in Figure 8, include:

- Chinese coin from 20th Century
- 19th Century Ceramics
- 12th Regiment Foot button (from uniform of officers stationing during Lambing Flat Riots)
- NSW Police button (from specific uniform worn during Court attendance)
- Aboriginal artefacts.

European architectural narrative and response

The massing, forms and detailing of the facility were determined through consultation with stakeholder groups and derived as a result of:

- The bulk and scale of the courthouse
- The historic setbacks and subdivision patterns of the site
- Sightlines to the Courthouse
- The height of Courthouse facade elements.

Figure 8

Archaeological Findings



Source: Hayball

Key outcomes from the heritage investigation that were adopted in the design response were:

- Currawong Walk (historically Currawong Street) is re-established as a means of community access to the facility via Carrington Park.
- Layered historic and cultural landscape of the site, with consideration to character, scale, proportion, form, materials and colour were interpreted throughout the design of the facility.
- Heights of the various stepping forms of the facility were derived from the horizontal and vertical datums and forms of the former Courthouse (administration building) particularly when viewed from in front of the former gaol.
- Existing courthouse facade was also studied to understand the stepping and rhythm of the façade.
- Viewed from the north-west in front of the former gaol the facility can be seen to respond to

the scale, form and vertical proportion of the Courthouse (Figure 9).

- Viewed from the north-east the facility appears more horizontal and sinuous, responding to the cultural spaces and heritage elements within the landscape and referencing a more organic stratification of land formation. Sinuous forms of the building footprint also create protection zones for heritage elements with the landscape (Figure 10).
- Views from the gaol within the park towards the former courthouse are enhanced by the new curtilage (Figure 11).

Figure 9

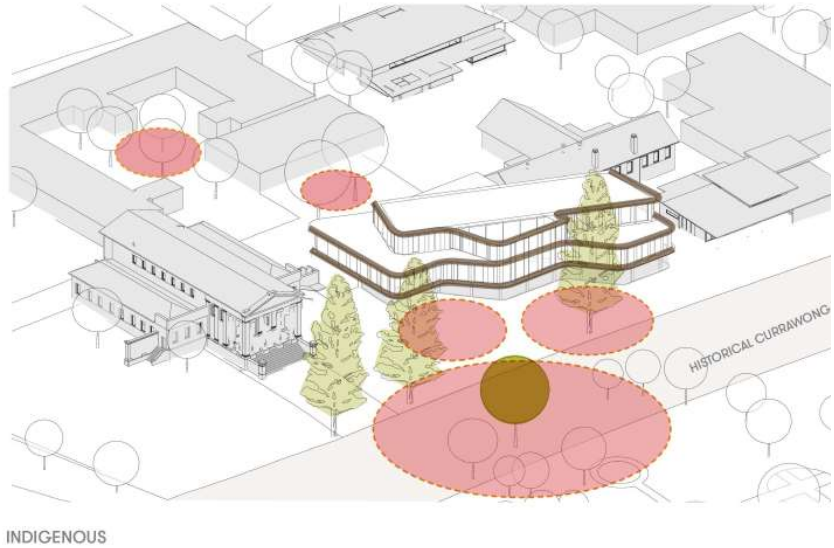
View from North West. Response to European Curtilage.



Source: Hayball

Figure 10

View from North East. Sinuous Forms Create Gathering Spaces and Protection Zones.



Source: Hayball

Figure 11

Photomontage View from the North West Looking Towards the Facility



Source: Hayball

Functional organisation

There were significant challenges to be met in designing an integrated facility that simultaneously meets the needs of the school and the community, especially in terms of:

- access
- security
- duty of care, and
- seamless flow between related functional areas.

After much consultation, the floor plan emerged. Access is provided for community use of the joint use facilities out of school hours while maintaining the school's duty of care requirements through the careful zoning of community spaces, joint use spaces, school spaces, stairs and lifts along with the strategic placement of operable walls. The design enables the various community groups concurrent use of the facility, providing maximum school and community benefit. The lower ground floor (Figure 12) provides community access from Carrington Park and the reinstated Currawong Walk to the north.

The upper ground floor (Figure 13) is accessed within from a community stair or lift to the west, a shared staircase (north) or directly from the main school quadrangle to the south ensuring the library assumes prominence as being central to the school's learning spaces. This floor houses the joint use staff space, tertiary study space and a combination of school spaces for wellbeing, meetings, virtual learning and general school library spaces. Level 1 can be accessed either via the community stair, or lift, to the west or the school stair to the east (Figure 14).

Figure 12

Lower ground floor with separate community and school access and egress, carefully zoned areas and operable doors and walls to delineate community and school use during school hours.



Source: Hayball

Figure 13

Upper Ground Floor Plan



Source: Hayball

Figure 14

Level 1 Floor Plan



Source: Hayball

Level 1 accommodates school art and computer facilities, with the inclusion of a community art storage space to support community use of the art facilities.

All floors contain a range of bespoke social, gathering, professional, cultural and learning settings that respond to the various stakeholder needs and support whole of life learning. The zoning of the facility works in combination with a clear definition of vertical circulation paths and a series of movable walls. These adaptable modes ensure that the facility can be used throughout the day for maximum school and community benefit whilst still meeting duty of care obligations. Internally the facility allows for lines of demarcation between the school and community to be adapted throughout the day. Figure 15 illustrates how this is achieved.

The orange 'shared' zone includes the main collection (see Figure 16), staff, administration and shared circulation. The yellow zone is designated 'Community' use and enables activities such as reading, gathering, workshopping, exhibition and storage. School users also use these community zones with supervision. The blue zone is designated school use during school hours. Community members can use these zones outside school hours by bookable arrangement.

Each zone is provided with separate vertical circulation. School users can pass independently through the floors within the blue school zone, and community users can access each floor after hours without needing to circulate through the school or shared zone. All users have access to additional vertical circulation paths within the shared zone. A series of sliding and operable walls (indicated in red and blue in

Figure 15

Zoning of Spaces to Achieve Shared and Concurrent Use



Source: Hayball

Figure 16

Photomontage of the Community Entry through to the Joint Collection



Source: Hayball

Figure 15) allow further division of the space if required. 'Soft system' elements, policies and protocols are being developed collaboratively by the stakeholder groups to complement the carefully considered design of the 'hard spaces'.

Situating this case study within the NSW context at the time

The SINSW School Assets Strategic Plan (NSW Dept of Education, 2017) formalised NSW's intention to develop schools as community hubs. Although there were several existing examples of 'joint use' school libraries in NSW, these projects had been conceived at a local or regional level prior to the development of Department-wide policy on joint use. Two of the three existing joint use library projects were successful in achieving their aims while the third had not been successful and was to be disbanded. With the lack of a Department policy to guide the individual projects, their success was dependent on whether there was a collective vision that maintained currency and whether appropriate governance and operational systems were in place to ensure the sustainability and practicality of the vision. A report by the Audit Office (2017) noted:

The Department is planning to focus on joint use agreements with local councils. Several agreements are currently being piloted and will be evaluated to provide an evidence-based foundation for this new approach.

To develop or refurbish school facilities for joint use, councils, the Department and other key stakeholders must work more closely together and prioritise joint use from the earliest stages of any project. A collaborative, multi-agency approach is needed …

At the time of the initiation of YHS-Hilltops project, mid-2018, the joint use policy and procedures were still very much in the pilot stage.

Funding and ongoing operations and other challenges

It is one thing to conceptualise and design a true community hub, it is another to develop the governance and funding models that will make it sustainable and the policies and protocols that will ensure its safe and secure operation.

Breaking new ground, wherever and whenever it happens, brings its challenges beyond the challenges posed in the complex brief and heritage overlay for the YHS-Hilltops Council project. As a pilot project, it was required to develop systems for capital expenditure and operating expenditure and to develop, collaboratively, policies and protocols. Without a clear pronouncement of the intention of new approaches, staff hold on to old models and it is difficult to develop a win-win mentality in siloed departments. The old proverb, 'where there is a will there is a way' is a fitting statement regarding the importance of a collective shared vision. Despite many obstacles, the project is at last 'shovel ready' with the construction of the new facility to begin at any time.

Conclusion

Understanding the place and the community who will use the facility has been a key pillar in the success of the project thus far. A strong shared vision and clear identification of needs together with the fortuitous existence and inclusion of historical buildings, have led to the development of a highly integrated, adaptable facility that responds to school and community needs. The completed facility will support whole of life learning and community building while celebrating the rich multicultural history of the land and the people of Hilltops.

References

Audit Office NSW. (2017, November). *Sharing School and community facilities*. p.2 Retrieved from https://www.audit.nsw.gov.au/our-work/reports/sharing-school-and-community-facilities

Centre for Excellence in Universal Design. (2020, August 14). *The 7 Principles*. Retrieved from What is Universal Design: http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/

Clandfield, D. i. (2010, Volume 19, Number 4, Issue #100). *The School as Community Hub: Beyond Education's Iron Cage*. Our Schools/Our Selves.

Halsey, J. (2018). *Independent Review into Regional, Rural and Remote Education*. Canberra: Commonwealth of Australia.

Hayball. (2018). *Consultation notes YHS* (unpublished).

Hayball. (2019). *Young High School Community Library Design Analysis Report* (unpublished).

NSW Department of Education. (2020, August 16). *Education Facilities Standards and Guidelines*. Retrieved from https://efsg.det.nsw.edu.au

NSW Department of Education. (2020, April 15). *Policy Library*. Retrieved from Joint Use of School Facilities and Land Policy: https://policies.education.nsw.gov.au/policy-library/policies/joint-use-of-school-facilities-and-land-policy?refid=285776

NSW Department of Education. (2020, July 13). *Policy Library*. Retrieved from Community Use of School Facilities: https://policies.education.nsw.gov.au/policy-library/policies/community-use-of-school-facilities

NSW Dept of Education. (2017, June). *School Infrastructure NSW*. Retrieved from https://www.schoolinfrastructure.nsw.gov.au

SINSW. (2018, August). *Joint Use Opportunities and school upgrades*. Presentation to Hilltops Council.

State Library NSW. (2020, August 16). *People Places: A guide for planning public library buildings*. Retrieved from https://www.sl.nsw.gov.au/public-library-services/people-places

United Nations. (2020, January 24). *Sustainable Development Goals*. Retrieved from https://www.un.org/sustainabledevelopment/sustainable-development-goals/

Young Shire Council. (2014, November). *Council Major Projects*. Retrieved from Young Shire Council Cultural Infrastructre Masterplan: https://www.hilltops.nsw.gov.au/getattachment/Council/Major-projects/Hilltops-Cultural,-Community-and-Education-Precinc/YoungCulturalInfrastructureMasterplan.pdf.aspx?lang=en-AU

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SCHOOLS AS COMMUNITY HUBS: THE LASTING INFLUENCE OF JOHN DEWEY'S PHILOSOPHY

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This paper retains the authors' use of American English.

Abstract

This paper surveys both contemporary and historic interpretations of community schools with respect to philosopher John Dewey's web of life concept, where life and pedagogical practice were viewed in terms of their interrelations. As Founder of The Laboratory School, completed in 1903 on the University of Chicago campus, he proposed distinctive facilities in keeping with his educational vision. Chicago Public School's Community School Initiative, became the largest community schools' system in the United States. Nettelhorst School is presented to illustrate the district's mission. A circumscribed historical timeline provides context. The paper closes by assessing associations between curriculum, society, and the built environment, appraising a contemporary community school system in terms of Dewey's ideas proposed more than a century ago.

Keywords: John Dewey, community, web of life, schools, architecture

Schools as Community Hubs: The Lasting Influence of John Dewey's Philosophy

In March 2020, our local school district closed as a precaution to help mitigate the spread of the coronavirus. It took the school district about a week to establish food delivery for the nutrition program, plus another week to make it more effectual. Approximately two weeks after schools closed parents and students were informed that no curriculum was going to be provided, however enrichment materials would be made available. While all students in this district have a school provided laptop computer, not all students' families have access to internet services. Our local school district was not yet of the mindset that the quarantine would last long.

Little did we know the extent to which our lives would be affected by the pandemic. The initial short-term closure was soon extended to the end of the school year. It was at this point that I contacted my children's school principal to advocate for teachers to maintain contact with their students. In the principal's reply she informed me that student teacher relationships were very much on her mind. Further, she wanted me to know that the most vulnerable students, those with depression, suicidal ideation, compromised housing, and anxiety had been checked regularly.

The principal's communication was a reminder of the many social services provided by our public schools. Behind a curtain of privacy our schools have responsibility for so much more than traditional school subjects, like math and reading, with educational professionals addressing the immediate and pervasive needs of students. The pandemic facing us in 2020 has presented new challenges to keep students safe, healthy and ready to be engaged academically. Our local school district is not part of a community school system. However, community school structures influenced by the Progressive Era, and the philosophy of John Dewey in particular, offer wisdom and insights to inform our educational futures.

Background

John Dewey's contributions to philosophy and education are well known. Dewey, with University of Chicago president William R. Harper, founded the Laboratory School in 1894. They aspired to present an alternative to the formal schooling of the time (Wirth & Bewig, 1968; Knoll, 2014).

Architects of this era looked at natural daylighting, the practice of placing windows to maximize sunlight for internal lighting, from a different perspective. By aligning desks and chairs, architects could control the shadows cast from the light beaming through windows. The architects used this formula: width of room not to exceed two times the overall height of windows, windows cover 40-50% of exterior wall = to 25% of floor area. The ideal classroom of the time held forty-two desks, in rows of seven by six, with a room dimension of 23' x 29' (Weisser, 2006).

In contrast, the design of the Laboratory School sought to eliminate waste and isolation. Waste in school, as Dewey saw it, was the inability to utilize that which the student brought from home life. Likewise, if a student was unable to apply what s/he learned in school to life in society that too was regarded as

waste (Wirth & Bewig, 1968). Dewey offered:

> The ideal home would naturally have a workshop where the child could work out his constructive instincts. … The life of the child would extend out of doors to the garden, surrounding fields, and forests. He would have his excursions, his walks and talks, in which the larger world out of doors would open to him (1920, p 35).

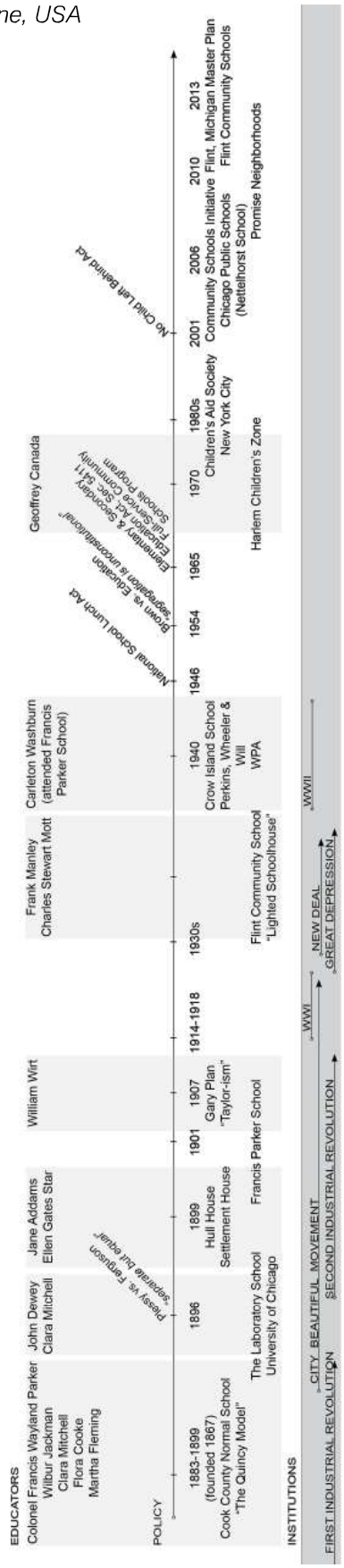
As chair of the departments of pedagogy and philosophy at the University of Chicago, Dewey advocated creating distinctive facilities reflective of his educational vision. He believed it was essential to correlate the physical form of the school building with the school grounds (Wirth & Bewig, 1968). Dewey felt that school had a fundamental responsibility to aid young people in understanding the larger world around them (Wirth, 1968). What happened at school needed to be relevant at home and what happened at home needed to be applicable at school. With this in mind, teachers were tasked with converting the curriculum into problems for students to analyze and develop strategies of action to address the problems identified. In this way students were actively engaged in *thinking and doing* and *reflecting* on their actions with teacher support (Knoll. 2014).

These progressive ideas took school design from bolted down desks and chairs to movable furniture, natural lighting, fresh air and expansion of classroom activities to the outdoors. The Laboratory School model included workshops, experimental gardens, kitchens, laboratories and accommodations for creative expression through the arts and drama (Wirth & Bewig, 1968). The common theme in the curriculum of the Laboratory School was the *web of life* and subjects were studied according to their interrelationships. Dewey's philosophy proposed that the school is society, stressing character building on the part of the student and responsibility on the part of the school community through a close connection with the natural environment. He advocated first-hand contact with what he called "a close and intimate acquaintance" with nature (Dewey, 1920, 11).

Dewey's work co-occurred with other influential social movements and activists. These included the City Beautiful Movement, an architecture and landscape architecture response to deteriorating living conditions in cities following Industrialization. Jane Addams' and Ellen Starr's Hull House, located on the west side of Chicago, was an early settlement house offering multiple social services based on the model of Toynbee Hall in London's East End. Another example was Cook County Normal School for teacher training directed by Colonel Francis Parker, who Dewey referred to as the *father of Progressive Education* (refer Figure 1). Parker's educational philosophy of teaching to the whole child was notable for its supportive environment, innovation, and experimentation for students and teachers alike (Gross, 2009; Goulah, 2010). Further, Parker believed the success of democracy was in large part dependent on the success of schools. To Parker and Dewey, school was the training ground for good citizenship. Moreover, Parker saw school as a form of community life (Cooke, 2005).

Figure 1

Limited Community School Timeline, USA



Source: Author

Similarly, Dewey believed that school was preparation for citizenship not solely related to the state, but a thoroughly socialized affair connected to all aspects of community life. Accordingly, community life shared in all intellectual and spiritual resources (Dewey, 1902). Dewey recognized the applied science of his time, indeed Industrialization rapidly changed community compositions. Schools as social centers brought people together, promoted empathy, and facilitated understanding of difference (Dewey, 1902). The continuity between home and school, to which Dewey referred, confirms the importance of the design of school experience structured through community to form a democratic society.

Community School Visions

The Coalition for Community Schools and the Institute for Educational Leadership advocacy groups have outlined a hopeful vision for community schools from a Deweyan perspective (Melaville & Blank, 2011). For a little over a century, the community school movement in the United States has looked to Dewey's example of *school as social center* (Blank, Melaville & Shah, 2003). During the Depression of the 1930s, The Mott Foundation in Flint, Michigan supported lifelong learning for adults and children with after school recreation programs. During the 1970s the Community Schools Act and the Community Schools and Comprehensive Community Education Act provided federally sanctioned funding for community-centered programing. The following decades saw a variety of community school organizations take shape, including the Children's Aid Society, Communities in Schools, Beacons Schools, Healthy Start, Caring Communities, among others. Their missions encompassed family support centers, health and mental health services, early childhood and after school programs, adult learning, partnerships with businesses and civic groups, and shared use of facilities after school hours (Melaville & Blank, 2011). A new federal program in 1998 increased funding from the 21st Century Community Learning Centers Program, further increasing the visibility of community schools as a whole.

Through increased collaboration with businesses and non-profit service organizations, more community schools have grown from their historic role as social centers to multi-use educational facilities. Coalition for Community Schools identifies three important factors contributing to expansion in community school development, moving from individual schools to entire districts:

- educators and policy makers are less focused on test scores
- community partnerships underscore specific community needs
- support from public and private, local, state and federal agencies (Blank, 2018)

Other factors commonly associated with community schools is the four pillars model:

- integrated student supports on site
- expanded learning time and opportunities
- family and community engagement
- collaborative leadership (Oakes, Maier and Daniel, 2017).

These pillars are described as self-reinforcing.

Another popular model is the developmental triangle, with each side of the triangle connected to and integrating three key concepts:

- core instructional program
- expanded learning opportunities
- comprehensive support services on site.

The three sides of the triangle form a framework around the community, the family, and the child (Lubell, 2011).

Chicago Public Schools and the Sustainable Community Schools Initiative

The campaign to increase community school models in Chicago began in the mid-1990s when Arne Duncan became CEO of the Chicago Public Schools. Funding partnerships led by the Polk Brothers Foundation in a public/private venture supported a pilot program to organize 100 community schools in the city (Melaville, Jacobson & Blank, 2011; Nicely, 2016). By 2007 Chicago Public Schools represented the largest community school network in the United States providing a range of services to individual school communities in partnership with over 400 community non-profit organizations (Bingler, 2010). The Sustainable Community School Initiative has endured. In 2018, Chicago Public Schools announced an additional investment of 10 million dollars (US) to aid community school programing in 20 schools, to increase access to programs for students, teachers, and parents (CPS, 8/7/18).

Chicago Public Schools participating in the Sustainable Community School Initiative encourage a *place-based approach* in which schools' partner with local agencies to support academic achievement, health and social services, as well as encourage community and parental engagement. In a place-based approach the local context defines the specific community program (Oakes, Maier & Daniel, 2017). Dewey's ideology can be identified in this model, where relevance of what happens at home is advanced by what happens at school. Further, place-based education is described as immersion in local ecologies, cultures, and heritage as a foundation for studying math, language arts, and sciences (PEEC, 2004). This could further be described as *topophilia*, love of place, attachment to place, or homeland, understood at different scales (Tuan, 1990). Constructivist, project-based and place-based education draws on progressive ideas that encourage community building through multi-disciplinary activities with relevance beyond the school walls (Williams, 2017). Schools as community hubs support democracy in education, through community participation and partnerships in design and planning on the front end and ongoing adjustment to program delivery throughout the life of the community school. This reflects Dewey's philosophy of *thinking and doing*, and *reflecting* (Bingler, Quinn & Sullivan, 2003). As community schools advance through *thinking and doing*, adjustments that best address the ongoing evolution of the community are made (*reflecting*).

Louis B. Nettelhorst School, Chicago, Illinois

Louis B. Nettelhorst School is a Chicago Public School serving children in kindergarten to 8th Grade. Nettelhorst School is part of the Sustainable Community School Initiative. The school is named after a popular German immigrant known for his advocacy of physical education and teaching of the German language. Louis B. Nettelhorst served on the Chicago Board of Education for seven years during the late 19th century (Bachrach, 2012). Nettelhorst School, established in 1892, is housed in an historical building designed by J. J. Flanders. In 1911, Arthur F. Hussander designed an addition to the school and a three-story wing was added to accommodate 2,200 students in 1937. Over the years, Nettelhorst School has struggled with deteriorating facilities, declining enrolments, and poorer academic achievement (Bachrach, 2012). The recent turnaround of the school is credited to an initiative that gathered parents, teachers and community leaders to get behind the project to renew Nettelhorst School and revitalize the neighborhood. A coalition of dedicated parents was able to procure project funding, in-kind donations, and volunteer labour to renovate their school (Wilson, 2011). Today the school serves over 700 students.

The outward appearance of Nettelhorst School is visually rich with exterior artwork, murals, linear gardens, a chicken coop, and outdoor classroom along the perimeter of the building in the Lake View neighborhood of Chicago. Bright colors and foliage standout against the historical masonry building. Two murals in the school's art collection have been restored by Works Progress Administration and a number of other artworks, inside and out, have been revitalized by local Chicago artists. Some of these projects were created in collaboration with Nettelhorst students. The outdoor classroom at Nettelhorst uses the Nature Explore model which uses data informed design, curriculum resources, and educator workshops among other related programing. Nettelhorst School strives to be the center of its community through contact with nature that facilitates topophilic and biophilic predispositions. This is occurring through community engaged programming inclusive of arts expression and urban centered gardening practices open to all residents every day, evenings and weekends, while at the same time focusing on the students with resources for health, social services and academic attainment. After school programing and adult education are offered. Residents are invited to participate in garden events as well as school governance activities. Expectations for students and families are listed on the school website and instruct the school community to *take care of yourself, take care of others*, and *take care of our environment*.

Nettelhorst School engages with non-profit partners unique to the school community to address the needs of the whole child. Further, as one of over 200 community schools in the Chicago Public School District, Nettelhorst School has become the center of the community it serves, offering an array of onsite programs. These programs have been defined by educators, parents, residents, businesses, and community agencies that are available on site throughout the school day, evenings and weekends.

Every community school is different, varied to meet the unique needs of its community with programs and partnerships tailored to meet those requirements. In this way Sustainable Community Initiative schools become, or are enhanced to be, hubs of their communities. As one collaborator of Nettelhorst's program commented:

> Architecture for Humanity Chicago was thrilled to collaborate with The Nettelhorst School to design the concepts that would ultimately lead to the Outdoor Classroom. The space created allows for imagination and learning beyond the narrow borders of the lot, entices the community to participate, and provides a unique educational opportunity that should be modeled across Chicago Public Schools (Katherine Darnstadt, Architecture for Humanity Chicago, Nettelhorst School website).

Conclusion

The antecedents to Community schools in the United States can most often be traced to the Progressive Era and the work of John Dewey. His work represents a shift in educational practice of the time which had a lasting influence on pedagogy, school architectural form, and relationship of the school to the larger community. The social activism of the era influenced Dewey's work. Since that time, public and private partnerships along with federal policy have fuelled community school development and led to a range of community school structures. Dominant themes including expanded learning opportunities, comprehensive support services on site, community-based partnerships, and family and community engagement, remain pillars of successful programs while honoring individuality of each community. As Dewey might advocate, thinking and doing, and reflecting are evident in the processes used by Chicago Public School's Sustainable Community Schools Initiative. Nettelhorst School is an example of a Chicago Public School that embraces the Sustainable Community Schools Initiative and has become a community hub that nurtures the whole child through the lens of the value of community experience. This would be in keeping with Dewey's web of life concepts, that life and pedagogical practice should be practiced in terms of their interrelations.

References

Bachrach, Julia S (2012). *Louis Nettelhorst School*. Chicagoology. Chicago: Rand McNally, https://chicagology.com/?s=nettelhorst+school

Bingler, Steven; Quinn, Linda; and Sullivan, Kevin (2003). *Schools as Centers of Community: A Citizen's Guide for Planning and Design*. National Clearinghouse for Educational Facilities: Washington, D.C. https://files.eric.ed.gov/fulltext/ED539486.pdf

Bingler, Steven (2010). *What if: New Schools; Better Neighborhoods; More Livable Communities*, NSBN Monograph, http://www.nsbn.org/publications/whatif/index.html

Boyte, Harry C. (2017). *John Dewey and Citizen Politics: How Democracy Can Survive Artificial Intelligence and the Credo of Efficiency*. Education and Culture 33(2) 13-47. https://www.researchgate.net/publication/321739400_John_Dewey_and_Citizen_Politics_How_Democracy_Can_Survive_Artificial_Intelligence_and_the_Credo_of_Efficiency

Blank, Martin J.; Melaville, Atelia; Shah, Bela P. (2003) *Making the Difference, Research and Practice in Community Schools*. Coalition for Community Schools, Institute for Educational Leadership. http://www.communityschools.org/assets/1/Page/CCSFullReport.pdf

Blank, Martin J. (2018, December 7). *The Future is Bright for Community Schools*. Center for American Progress. https://www.americanprogress.org/issues/education-k-12/news/2018/12/07/461979/future-bright-community-schools/

Chicago Public Schools (2018, August 7). *Mayor Emanuel and Chicago Public Schools Announce 20 CPS Schools to Receive $500,000 Each as Part of Sustainable Community Schools Initiative*. Office of Communications.

Chicago Public School. (2020). *Community School Initiative*. https://www.cps.edu/about/departments/community-schools-initiative

Cooke, Flora, J. 2005. *Colonel Francis W. Parker: His Influence on Education*. Schools: Studies in Education, 2(1), 157-170. https://www.jstor.org/stable/10.1086/589166?seq=1

Da Silva, Joseph (2018). *School(house) Design and Curriculum in Nineteenth Century America, Historical and Theoretical Frameworks*. Palgrave Macmillan.

Dewey, John (1902). *The School as Social Centre*. The Elementary School Teacher, 3(2), 73-86

Dewey, John (1920). *The School and Society*. Revised Edition. University Chicago Press.

Dewey, John (1958). *Experience and Education*. Dover Publications (Original work published 1925)

Dewey, John and Dewey, Evelyn (1962). *Schools of Tomorrow*. E.P. Dutton & Co., Inc. (Original work published 1915)

Dewey, John (2019). *Democracy and Education*. Digireads.com Publishing. (Original work published 1916, renewed 1944)

Goulah, Jason (2010). (Harmonious) *Community Life as the Goal of Education: A Bilingual Dialogue between Tsunesaburo Makiguchi and Francis W. Parker*. Schools: Studies in Education 7(1) (Spring) 64-85

Gross, Matthias (2009). *Collaborative Experiments: Jane Addams, Hull House and Experimental Social Work*. Social Science Information, 48(1), 81–95. DOI: 10.1177/0539018408099638

Knoll, Michael (2014). *Laboratory School, University of Chicago*. In: Encyclopedia of Educational Theory and Philosophy, ed. D.C. Phillips. 2, 455-458. https://www.researchgate.net/publication/309311586_Laboratory_School_University_of_Chicago

Lubell, Ellen (2011). *Building Community Schools: A Guide for Action*. National Center for Community Schools, Children's Aid Society. https://eric.ed.gov/?id=ED540950

Melaville, A., Jacobson, R., Blank, M. J. (2011). *Scaling Up School and Community Partnerships: The Community Schools Strategy*. Coalition for Community Schools, Institute for Educational Leadership. http://www.communityschools.org/assets/1/AssetManager/Scaling%20Up%20Community%20Schools%20Final%20092011.pdf

Nettelhorst School, *Chicago Public Schools*, https://www.nettelhorst.org

Nettelhorst School, *Chicago Public Schools, Outdoor Classroom, Supporters, What People are Saying* [brochure] https://www.nettelhorst.org/apps/pages/index.jsp?uREC_ID=273469&type=d

Nicely, Tanna H. (2016). *An Examination of the Community School Model in an Urban School Setting*. [Electronic Theses and Dissertations, Paper 3066]. https://dc.etsu.edu/etd/3066

Oakes, J.; Maier, A. and Daniel, J. (2017). *Community Schools: An Evidence-Based Strategy for Equitable School Improvement*. Boulder, CO: National Education Policy Center. Retrieved 2020 from http://nepc.colorado.edu/publication/equitable-community-schools

Place-based Evaluation Collaborative, (PEEC) (2004). *Promise of Place, What is Place-based Education?* Accessed, 6/2020 http://www.seer.org/pages/research/PEEC%202004.pdf, https://promiseofplace.org/what-is-pbe/what-is-place-based-education

Tuan, Yi-Fu (1990). *Topophilia, A Study of Environmental Perception, Attitudes, and Values*. Columbia University Press

Wirth, Arthur G. and Bewig, Carl (1968). *John Dewey on School Architecture*. Journal of Aesthetic Education. 2(4), 79. doi:10.2307/3331646.

University of Chicago, *The Laboratory School*. https://www.ucls.uchicago.edu/deweythenandnow/about-the-conference

Williams, Morgan K. (2017). *John Dewey in the 21st Century*. Journal of Inquiry and Action in Education. 9(1), https://digitalcommons.buffalostate.edu/jiae/vol9/iss1/7/

Wilson, Beth (2011, January 10). *Nettelhorst Elementary School's Remarkable Turnaround.* Chicago Magazine. https://www.chicagomag.com/Chicago-Magazine/January-2011/Nettelhorst-Elementary-Schools-Remarkable-Turnaround/

Zilversmit, Arthur (1993). *Changing Schools, Progressive Education Theory and Practice, 1930-1960.* The University of Chicago Press

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INTEGRATION OF SCHOOLS AND COMMUNITY INFRASTRUCTURE: A NETWORK ANALYSIS

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Abstract

This paper presents a literature review and preliminary research design addressing the key research question: What are the roles of schools within a community infrastructure network? The research explores the integration of school and community infrastructure, investigating the boundaries and connections between different forms and providers of social infrastructure. Historically, opposing school design objectives of connection and security have challenged the development of schools as community hubs, whereby the use of school facilities by the wider community has often been poorly planned and/or resolved in practice. This research proposes a networked approach to understanding social infrastructure, including schools and a range of community-focussed facilities, to explore existing and potential connections between facilities and their users.

Keywords: community infrastructure, school infrastructure, networks, schools

Integration of Schools and Community Infrastructure: A Network Analysis

Community Use of Schools: An Introduction

As cities densify and pressures on land increase, the need for schools to share resources with the wider community becomes increasingly apparent (Cleveland, 2016; Sanjeevan, 2012; VCEC, 2009). This is especially true in Australia's major cities, where population growth is putting a strain on existing infrastructure. Similarly, as regional cities and peri-urban areas grow, scarce infrastructure funding must be 'stretched' to deliver better education, and health and wellbeing opportunities for more people (Hands, 2010, McShane et al, 2012).

In recent years there has been a push from Australian state governments for schools to act as community hubs (e.g. Department of Education and Training, 2017). The term "community hub", along with several synonyms such as "full-service school", "extended service school", "community school" etc. have multifaceted and nuanced definitions (Black et. al, 2011). Each of these terms generally refers to connections between a school and their local community by providing shared facilities and/or services that can be used outside school hours.

Yet, despite wide in-principle uptake (VCEC, 2009), little data has been collected to monitor how shared infrastructure, such as sporting facilities, multipurpose halls and health service facilities (e.g., maternal and child health) are being used by community members on, or near, Australian school sites. It is imperative to gain a thorough understanding of the use of these facilities by both school and community members to inform the effective planning and design of shared social infrastructure.

Research into schools as community hubs tends to focus on community members coming on to school sites to access community services. This paper proposes a shift in viewpoint, from one which is asking what schools can give to communities, to one where schools are viewed as one site in a broader, integrated network of community infrastructure. If the relationship is mutual, what do we find?

Connecting Shared Facilities

Anecdotal evidence suggests it is common for schools to use community assets, such as sporting facilities, yet limited data exists to quantify or illuminate the benefits of such activity. How many Australian schools are utilising community infrastructure beyond their boundaries? For what purposes? What are the benefits?

The proposed research involves a shift in how we view the operation of both schools and community facilities. Community facilities in Australia, like schools, have historically been stand-alone buildings, many of which started with community investment – both financial and emotional – as they were paid for and built by sporting clubs and local groups (McShane, 2006). Over time, local government authorities (LGA's) have commonly taken over the management of these facilities, shifting their focus

to become multi-purpose facilities, able to accommodate a wider cross-section of users and activities (McShane, 2006). However, these multi-purpose facilities remain largely stand-alone, with separate management structures and booking systems. They do not belong to well-integrated, nor well-understood, infrastructure networks.

Literature Review

There are many ways to study the relationships between schools and communities. The focus of this study is facility-based and spatial, yet also inherently social. This short literature review looks at relevant multi-disciplinary scholarly research from the fields of infrastructure policy, urban design theory, human geography, psychology and education.

Community Infrastructure Networks

A focus on social infrastructure was included for the first time in the *Australian Infrastructure Audit* in 2019 (Infrastructure Australia, 2019). Its inclusion responded to "the growing recognition of the role effective social infrastructure assets and networks play in supporting our nation's wellbeing" (p. 388). In the report, social infrastructure includes sectors such as healthcare, education, outdoor recreation, arts, culture, justice, emergency services and social housing (Infrastructure Australia, 2019). Community infrastructure fits within this 'social infrastructure' category and is largely provided by Local Government Authorities (LGA's) (McShane, 2006). McShane uses the term 'community facilities', which he defines as "recreational, cultural, educational, health and civic facilities available to the public" (McShane, 2006, p.269). The Australian Infrastructure Audit describes these facilities as "assets" and states that "while assets are often considered individually, our social infrastructure networks as a whole play a nationally significant role in supporting Australia's economy, liveability and sustainability" (Infrastructure Australia, 2019, p.388). It goes further, affirming that "the network of social infrastructure contributes to social identity, inclusion and cohesion and is used by all Australians" (2019, p.338). Throughout the report, social infrastructure networks are referred to frequently, yet without explanation. It seems logical to think about social infrastructure as a network, but how do these networks occur in practice?

Networks are commonly discussed, but it is important here to define what is meant by a social or community infrastructure network. The *Dictionary of Human Geography* (Rogers et. al., 2013) describes a network as a set of nodes and the paths linking them together. The Dictionary of Geography (Mayhew, 2015) expands, to describe *networks* as:

> A system of interconnecting routes which allows movement from one centre to the others. Most networks are made up of nodes (vertices), which are the junctions and terminals, and links (edges), which are the routes or services which connect them.

In the context of community infrastructure networks, it is relatively clear that the facilities

themselves can be seen as the "nodes", but what are the "links/edges" in these networks? One way to consider this research question is to look at the 'community' members as the links. But what is community?

Community

The term 'community' is frequently used but rarely defined. Lewi et. al. describe how definitions "have been multifarious and elastic" (2010, p.8). They also offer their own broad definition stating that the term "'community' encompasses a group of people bound together by common threads, including geographical location, ethnicity, socioeconomic status, sexuality, or circumstances" (2010, p.8).

Parker (2006) states "despite years of research and inquiry, definitions of "community" are unstable and fluid" (p. 472). Head (2007) suggests "the term 'community' is notoriously vague and value-laden" (p. 441), going on to argue that the term is overused in the political realm to imply harmony and unity without interrogation and commonly used in a 'symbolic' way, as a 'spray-on solution' to suggest that all members of an area or group have one voice, or one set of needs, whereas in fact each 'community' is made up of both individuals, and smaller communities.

Connecting Schools and Communities

Before connecting schools with social and community infrastructure, however, it is important to understand why this is a useful endeavour. There are efficiencies in land use, financial investment and asset utilisation (VCEC, 2009 p.IV). But beyond the numbers, are there social benefits to schools sharing infrastructure too?

Fisher (1998) argues that connecting schools and communities can lead to gains in social capital. While acknowledging that social capital is difficult to define, Fisher states "it seems to be dependent on a number of values – trust, reciprocity, networks and community cooperation" (1998, p.10). He then laments that due to concerns of safety and liability, school designs have continued to remain separated from their surroundings, stating that:

> The concern for safety and security in society is seen uppermost in the design and placement of schools – the idea of trust, networks, reciprocity and collaboration is seemingly deliberately designed out. Thus, opportunities for students and staff and parents and the community to 'learn' social capital are extremely limited and in fact in many cases almost physically impossible (Fisher, 1998, p.11).

These conflicting desires of safety and security, versus openness and connection, remain a challenge twenty years on in the discussion of community hub schools. So, how can both safety and connection be achieved? This is a key discussion in creating successful school and community integration, and one which will remain prominent throughout this research.

Morphet argues that social and community infrastructure is "essential for the functioning of society" (2016, p. 90). She also addresses the point that "planning for school places needs to be part of an integrated process for all infrastructure" (Morphet, 2016, p.95). While Morphet's book is focused on UK infrastructure, many of her findings appear highly relevant in Australia and elsewhere around the world.

School planning and community infrastructure planning have largely been undertaken in isolation from each other, often by different levels of government (Morphet, 2016; McShane and Wilson, 2017). While few authors discuss the interactions between school planning and urban planning or community infrastructure, McShane and Wilson (2017) have discussed the challenges in Victoria, Australia, where the State government generally oversees school provision and local governments provide community infrastructure – a stratification of roles that has produced few well-developed examples of unified planning and delivery. Nevertheless, a report prepared in 2009 by the Victorian Competition and Efficiency Commission (VCEC), specifically looking at the sharing of facilities in Victoria, states "of the 1577 Victorian government schools, as many as two-thirds might share their facilities in some way" (VCEC, 2009, p.XXVIII). It goes on to indicate that "better connections between what is wanted and what is available is a starting point for improving the benefits of shared facilities" (VCEC, 2009, p.33). Fisher (1998, p.6) suggests that "schools are now seen as not simply buildings but are organisations and networks of relations and communications". But has this translated to a physical change in how schools connect with their surroundings?

It is clear there are many potential benefits to connecting schools and communities, yet the literature above indicates that achieving such relationships is more complex than simply co-locating shared facilities on school sites. As Morphet discusses, the factor of integration is not addressed in current policy and is what can drive real change (2016, p.95).

Research Design

As a practicing architect, my interest in undertaking this research is to understand the role facilities play in school-community relationships – and in a broader context, the role of facilities in fostering communities. The research sits at the intersection between schools, communities and social infrastructure. By connecting these, the focus is on community infrastructure networks (see Figure 1).

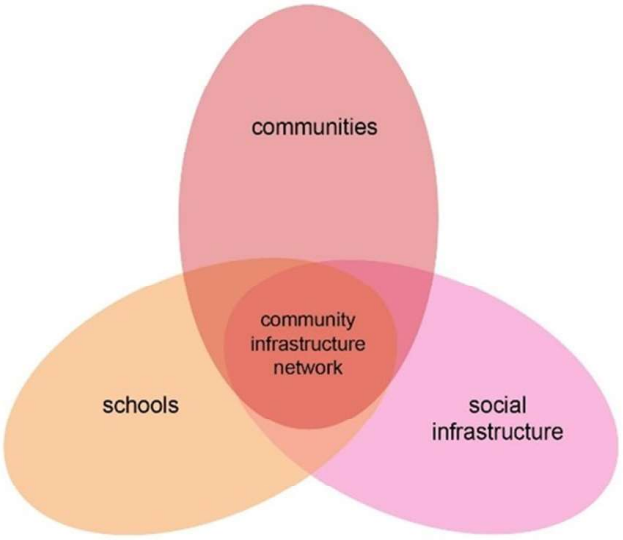
To position schools within community infrastructure networks, first we need to understand a) what the key elements of a community infrastructure network are, and b) how schools are currently sharing facilities. This leads to a three-phase study; 1) typologies of community infrastructure, 2) schools as sites of community infrastructure, and 3) community infrastructure network analysis, including school sites.

Phase 1: Typology study of community infrastructure

A typology of community infrastructure facilities will be developed from a study of existing literature – both academic research and government documentation. Fisher (1998) includes an extensive list of

Figure 1

Community infrastructure networks sit at the intersection of schools, communities and social infrastructure



Source: Author

potential examples of community facilities, such as community centres, libraries, sports centres, museums and hospitals. Interestingly, these are presented as potential learning environments, highlighting the scope for inclusion in a school and community infrastructure network involving schools using off-site facilities, just as members of the broader community might use school-located facilities.

Phase 2: Schools as sites of community infrastructure

How schools share facilities with community groups will be examined using a number of schools as case studies. The schools as case studies will be chosen where they have a variety of shared facilities; the purpose being to explore if and how school-based shared facilities are different to their community-based equivalents. Spatial relationships and affinities will be mapped, along with key factors such as access and site boundaries.

Key questions addressed in this phase are: What facilities are schools currently contributing to community infrastructure? Are community facility building types different when located on a school campus? How are they integrated with the school?

Phase 3: Community infrastructure network analysis

The community infrastructure networks will be mapped, including at least one school which is currently sharing facilities studied in Phase 2. This will commence with a pilot study of one local network, chosen from the schools studied in Phase 2. Once the pilot study has been analysed, multiple networks will be mapped to include a variety of geographic locations: inner city; suburban; peri-urban; regional centre.

This phase will analyse the relationships (both existing and potential) between schools and community infrastructure networks by mapping all facilities available within the network and exploring the associated social connections and shared benefits (if any).

Key questions addressed in this phase are: How are schools currently accessing off-site community infrastructure? What connections/relationships/affinities exist in community infrastructure networks?

Conclusion

This paper outlines the background and broad research design for the author's PhD research into the roles of schools in community infrastructure networks. This research is exploratory and aims to broaden the discussion on school and community relationships, with a focus on the physical settings in which such relationships may be fostered. The outcomes of this research will assist future school planning and design by outlining the contexts in which school located facilities can be integrated with community infrastructure networks, helping to facilitate strengthened connections between schools and their communities.

References

Black, R., Lemon, B., & Walsh, L. (2011). *Literature review and background research for the National Collaboration Project: Extended Service School Model*. Melbourne: Foundation for Young Australians. Final Report. https://www.fya.org.au/app/theme/default/design/assets/publications/Literature-review-and-background-research-for-the-National-Collaboration-Project.pdf

Cleveland, B. (2016). *A school but not as we know it! Towards schools for networked communities*, Australian Association for Research in Education (AARE) Conference 2016

Department of Education and Training. (2007). *Shared Facilities Fund*. Retrieved 24 February 2020, from https://www.schoolbuildings.vic.gov.au:443/Pages/shared-facilities-fund.aspx

Fisher, K. (1998). *Making Better Use of School Buildings: Schools as Social Capital*. OECD/EIB Seminar. Appraisal of Educational Investments. Indicators for Evaluating Educational Facilities and their Utilisation. Luxembourg.

Hands, C. M. (2010). *Why collaborate? The differing reasons for secondary school educators' establishment of school-community partnerships*. School Effectiveness and School Improvement, 21(2), 189–207. https://doi.org/10.1080/09243450903553993

Head, B. W. (2007). *Community Engagement: Participation on Whose Terms?* Australian Journal of Political Science, 42(3), 441–454. https://doi.org/10.1080/10361140701513570

Infrastructure Australia. (2019) *Australian Infrastructure Audit 2019 | Infrastructure Australia*. Retrieved 29 September 2020, from https://www.infrastructureaustralia.gov.au/publications/australian-infrastructure-audit-2019

Lewi, H., Nichols, D., Goad, P., Willis, J., & Darian-Smith, K. (2010) *Making the Modern Community*. In Lewi, H., & Nichols, D. (Eds.). *Community: Building modern Australia*. (pages 1-23). UNSW Press.

Mayhew, S. (2015). Network. In A Dictionary of Geography. Oxford University Press. https://www.oxfordreference.com/view/10.1093/acref/9780199680856.001.0001/acref-9780199680856-e-2155

McShane, I., Watkins, A. J., & Meredyth, D. (2012). *Schools as Community Hubs: Policy Contexts, Educational Rationales, and Design Challenges*. Sydney. Schools as Community Joint AARE APERA International Conference. https://files.eric.ed.gov/fulltext/ED544497.pdf

McShane, I. (2006). *Community Facilities, Community Building and Local Government – an Australian perspective*. Facilities, 24(7/8), 269–279. https://doi.org/10.1108/02632770610666125

McShane, I., & Wilson, C. K. (2017). *Beyond the School Fence: Rethinking Urban Schools in the Twenty-first Century.* Urban Policy and Research, 35(4), 472–485. https://doi.org/10.1080/08111146.2017.1310098

Morphet, J. (2016). *Infrastructure Delivery Planning: An Effective Practice Approach*. Policy Press.

Rogers, A., Castree, N., & Kitchin, R. (2013). Network. *In A Dictionary of Human Geography*. Oxford University Press. https://www.oxfordreference.com/view/10.1093/acref/9780199599868.001.0001/acref-9780199599868-e-1275

Sanjeevan, S., McDonald, M., & Moore, T. (2012). *Primary Schools as Community Hubs: A Review of the Literature. Parkville, Victoria: The Royal Children's Hospital Centre for Community Child Health*. http://www.rch.org.au/uploadedFiles/Main/Content/ccch/Schools_as_Community_Hubs_Lit_Review.pdf

Victorian Competition and Efficiency Commission. (2009). *Getting it Together: An Inquiry into the Sharing of Government and Community Facilities (DRAFT)*. Melbourne.

Williams, R. (2002). Keywords (Routledge Revivals): *A Vocabulary of Culture and Society.* Taylor & Francis Group.

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REAR VISION: LESSONS FROM COMMUNITY EDUCATION IN THE '80S – MELBOURNE, VICTORIA AND FLINT, MICHIGAN

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Abstract

This paper presents an historical framework of community education concepts with roots in Flint, Michigan (USA) and an early Melbourne, Victoria (Australia) example of a school as a community hub: the Princes Hill School Park Centre. The writer's reflective narrative reveals experience of a rich history of interaction between schools, communities, and local government, all fostering place-based neighbourhood decision making. It demonstrates the radical moves that were made to expand the concept of community education, from community use of school facilities to community empowerment and resilience. In the context of reviewing the current largely untapped potential of schools as community hubs, the term 'Rear Vision' emerged, reflecting a sense of 'looking back to look forward'. The experience of community education in the 1980s in Michigan and Melbourne, Victoria, can inform how 'schools as community hubs' embraced the building of new connections. In the 1980s, the Princes Hill School Park Centre adopted a community empowerment model reflecting the need to move beyond the use of school facilities and instead radically engage the school, local community and the local government in a range of activities that promoted and facilitated participatory decision-making. The history of the community education movement provides evidence that broadening the role of schools beyond the use of their facilities can build connections, resilience and participatory decision-making in a post pandemic and increasingly fractured world.

Keywords: school community, empowerment, connectedness, resilience

Rear Vision:

Lessons from Community Education in the '80s – Melbourne, Victoria and Flint, Michigan

The school community movement in the USA was founded in Flint, Michigan in the early 1930s in response to the impact of economic decline. This resulted in a range of issues, including unemployment, crime, youth delinquency, property damage to public buildings and increased community tensions, leading to an unstable and unsupported school system. Over the following decades community education, as it was termed, was fostered through a partnership between school districts and local authorities. It became synonymous with lifelong learning and school-based adult education programs and recreational activities. This was seen as an important part of a community's educational process in a changing society (Hiemstra, 1972).

Michigan roots, Melbourne beginnings

In 1974 the Recreation Superintendent of the City of Melbourne visited Michigan, USA, to research the birthplace of community education. The City of Melbourne subsequently promoted the role of the City in community education with its focus on lifelong education and recreational pursuits. The following year, the Hamer Liberal Government, recognising the need to facilitate community use of schools, amended The Education Act to become The Education (Schools Council's) Act 1975, and together with the Youth Sport and Recreation Act 1972, handed schools the power to enter into agreements for community use of school facilities.

In that same year, at an inner-city suburb of Melbourne, a public meeting of the Princes Hill school community was held in the school theatre. The meeting adopted a Constitution establishing the Princes Hill School Park Centre, a joint initiative of the Princes Hill High School Council, the Princes Hill Primary School Council and the Melbourne City Council. The Princes Hill School Park Centre (PHSPC) derived its name for its educational and recreational role from the contribution of school buildings and facilities and Princes Park, by the City of Melbourne. A Committee of management was elected. It was made up of school community representatives, nominees from the staff of both the schools, and a City Council representative.

> Since it first came into use in Australia in the early 1970's the term community education has been made synonymous with adult education, non-formal education, parent participation in schools, community development, improved use of community resources and so on (Townsend, 1990 p.61).

Most people viewed community education as school-based adult education, reflecting the North American influence. However, this changed over coming years to 'the identification of needs, wants and problems in a community' with an emphasis on participatory decision-making in the provision of services, programs and facilities (Townsend, 1990 p.62).

The establishment of the PHSPC in 1974 was a reflection of the early definition of community education – being the community use of school facilities for adult education programs and recreation activities. But the late 70s and early 80s were periods of change – economically, socially and politically – and community education became less focussed on use of school facilities, moving towards the development of strategies for the empowerment of communities through the interface of school and community and the strengthening of community participation in local agenda setting and decision-making.

Radical rules

The dismissal of the democratically elected Whitlam Federal Labour Government in 1975 enlivened many in the community who were seeking ways to realise the benefits that could be derived from a more active, influential and empowered community. The election of a new Melbourne City Council in 1983, following the sacking of the previous one, resulted in an increase in residents' representation. They sought to grow the City's social and environmental capital and respond to the needs and aspirations of the community. Change was in the air, with an increasing realisation of the need to bring the community into education, welfare, arts, recreation and public housing. School governance had shifted toward greater autonomy with the introduction of school councils with increased participation of parents, teachers and students in decision-making. Princes Hill Primary and High schools, through the Princes Hill School Park Centre were at the forefront of these changes.

In 1978 I was the first Community Education Officer to be appointed under the auspice of the Princes Hill High School Council and paid for by the Education Department. The role was to adopt a community development model, explore and capitalise on the interface between school and community, and develop programs and activities that responded to the interests, issues and needs of the school community. The Centre was to move from a centre of adult education to a centre that prioritised community outreach, empowerment and the participation of the school community in the governance of their schools and the wider community.

In May 1981, those attending the First National Community Education Conference, Southport, Queensland, were reminded of the move towards community empowerment in an address by Sugata Dasgupta titled 'Community Education as a Concept for a New Society'. In her address, Dasgupta stated that 'community education should be a movement towards a new society' a society that seeks 'not devolution of power; it is evolution of power' and 'evolved so that decentralisation is the result' (Dasgupta, 1981). Much of the thinking on empowerment at the time had its roots in the work of Saul D. Alinsky and the lessons he had learned throughout his experiences of community organising. His guide 'Rules for Radicals: A Pragmatic Primer for Realistic Radicals' published in 1971 set out how to run a movement for change. Alinsky's guide aimed at uniting low-income communities to gain political, social and economic power. He put forward tools to create powerful and active organisations through the sharing of social

problems to increase resident awareness of their commonalities and thus their capacity to seek change.

Roots and new rules

In 1983 I undertook a reciprocal exchange to St Ignace, Michigan, USA as Community Education Director for the Straits Area Community Education. As in Melbourne, the 80s in the USA was a time of change in the role of community education from adult education to community participation in both school and community. Community education in the Straits Area Schools District was not immune from this groundswell of action to empower citizens. When I arrived in St Ignace I found grassroots community activity being taken on board and was encouraged to respond with some of my Melbourne experiences and beliefs. A central example of applying Alinksy's 'rules' was the establishment of a community run cable television station that promoted not only local football games, but also local politics. The Council election was given greater coverage through the community television station that was beamed into every home and business. A Meet-the-Candidates at the local hamburger joint resulted in increased voter turn-out beyond that previously experienced. The community was ripe for participatory decision making at the school and community level, and the Straits Area Schools Board was swept along by a wave of 'empowerment that had its roots in an American tradition' (Osborne & Gaebler, 1993 p.51).

On my return to Melbourne in 1984, the Michigan experience contributed to the Princes Hill School Park Centre continuing to be at the forefront of the community education movement. The Centre initiated and fostered a range of projects, programs and activities drawing on the support of the school community including marginalised residents and those who previously had no interest in the schools apart from having their children attend. The Centre was open seven days a week for a diverse range of school community activities, a full time City of Melbourne Recreation Officer based at the Centre provided after school and holiday programs and sporting activities, whilst the Centre for Adult Education (CAE) introduced adult education classes of interest to local residents. Community artists were contracted to undertake writing and arts-based activities with residents and local groups to build connections across the diverse community. The Centre became a sought-after venue for a range of cultural and ethnic groups for regular functions and special events.

Innovative responses relevant for the times focussed on community engagement to address local issues, needs and interests. Building connections across the community became the modus operandi for the Centre. A locally based and owned community newspaper, 'City Alternative News' (CAN) became a voice of the community and on a monthly basis was distributed across Princes Hill and Carlton raising issues, interests and networks for the school community to join and support. As a result of the CAN lobbying, the North Carlton Railway Station Neighbourhood House was established in 1982. Previously abandoned and ripe for commercial investment, the station was handed over to the PHSPC at a 'peppercorn' rent following community lobbying of the Melbourne City Council and the State Government.

In partnership with the Montemurro Bocce Club, the Station was restored for use as a neighbourhood house and as a bocce court and barbeque area for an Italian community that had previously been isolated. The Neighbourhood House subsequently supported the establishment of a community flat in a nearby Housing Commission Estate that provided residents with a platform for their issues and interests and a steppingstone into the activities at the Neighbourhood House that included childcare, after school and holiday programs, and evening barbeques and bocce plays. 'Curtains for Carlton', a community arts project led by an artist, produced a joined-up community curtain comprising a tapestry of squares hand made by community organisations, groups and agencies. It was hung in the Princes Hill High School Community Cafeteria. The well frequented cafeteria provided before-school breakfasts and lunches and was a social venue for evening dining for local families.

A 'Case for Carlton' was published and presented to the Melbourne City Council following extensive community consultations. This was in response to widespread community concern that the needs of residents, especially those in public housing, were not being adequately met, particularly in relation to welfare support, employment and social housing. The 'Case for Carlton' contained overwhelming evidence of the need for expanding and improving the planning and delivery of community and childcare services provided by the City of Melbourne. The One C One Youth Centre in a nearby warehouse was established to provide school leavers with a place to socialise while gaining post-school advice on jobs, training and tertiary education. The establishment of 'The Island' in an off-site former kindergarten centre, provided students experiencing learning difficulties with a full-time structured classroom setting offering trade, craft and art skills to complement their time in the classroom. The high level of youth unemployment was a major issue that bedevilled the Australian economy and impacted on local communities, families and young people. While many of those issues remain today, communities are now faced with additional challenges as a consequence of the pandemic.

Looking back to look forward

Looking back on these examples of the role of school community hubs, we can see how it was 'about empowerment, about helping people to gain power over their own lives, thereby working towards a more equal distribution of power in our society' (Townsend, 1990 p.62). Today this definition holds true with its call for empowerment to ensure justice, equality and access to decision making that impacts the individual and community.

As we seek to build our resilience to those environmental, economic and social challenges, we will need to develop anticipatory and participatory ways of operating. Having schools as community hubs, building connections that pivot on the interface between the school community and local government, and empowering individuals and their communities in decision-making, will be some of the pathways that will help to secure our future in a post pandemic and fractured world.

References

Hiemstra, R. (1972) *The Educative Community: Linking the Community, School and Family Professional Education series*. Michigan: the University of Michigan.

Townsend, T. (1990) *Australia: Parent Involvement in Decision-Making*. In C. Poster and A. Kruger (Eds.) Community Education in the Western World. London: Routledge.

Dasgupta, S. (1981) *Community Education as a Concept for a New Society in First National Community Education Conference Report*, Southport Queensland.

Alinsky, S.D. (1971) *Rules for Radicals: A Pragmatic Primer for Realistic Radical*s. New York: Vintage Books.

Osborne, D & Gaebler, T. (1993) *Reinventing Government – How the entrepreneurial spirit is transforming the public sector*. New York: Penguin Books USA.



Yarrabilba Family and Community Place.
Photo by Community Hubs and Partnerships (CHaPs), Queensland Treasury, Queensland Government.

PART 4

ENABLING COMMUNITY HUBS

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RESEARCHING POLICY SETTINGS FOR SCHOOLS AS COMMUNITY HUBS

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Abstract

Schools as Community Hubs are recognised for their significant contribution to communities. Yet these projects must negotiate complex policy relationships, across disciplines and various government jurisdictions to achieve stakeholder and community support, funding, and delivery for long-term integrated benefits. Policy research in this area has been scarce. This study – in the early phase of a PhD – researches policy relationships for schools as community hubs through an interpretative analysis lens of both Bacchi's 'What's the Problem Represented to be?' (Bacchi, 1999), focussing on policy 'problematisation(s)', and that of performative and locally enacted policy (Ball et al., 2012). This framework is applied to an interpretative policy narrative of Yuille Park (Prep to Year 8) Community College, in central Victoria, Australia. Now proclaimed as a 'whole of life' community centre (DET, 2020), Yuille Park relied on the skill and continuity of key actors who gave – with little formal policy direction – coordinated solutions across service provision, urban planning and facility design that has made a difference to a struggling community, generating neighbourhood uplift and helping to overcome entrenched intergenerational challenges.

Keywords: schools as community hubs, interpretative policy analysis, policy problematisation, performative and enacted policy

The Problem with Policy for Schools as Community Hubs (SaCH): Some Background

The opportunity to better use and enhance school infrastructure through integration with programs and services directed towards the broader community has long been recognized. Proposals and projects for such integration date back at least a century. More recently, Cleveland and Woodman (2009) observed that school facilities are some of the most underutilised public and private assets in Australia, with most used sparingly outside of school hours, on weekends, or during school holiday periods. Additionally, Tayler et al.'s (2002, p. 1) observed that "a history of single focus, separate, specialised, and competing services has led to widespread dissatisfaction with service provision … viewed by many to be inflexible, inaccessible, or out-of-touch with the needs of contemporary families", a situation that continues to resonate almost twenty years later. Proposals to develop schools as community hubs are gaining momentum across Australia and internationally (Cleveland 2016). However, these proposals must negotiate a complex terrain of policy, coordinating objectives, priorities and funding sources within and between governments, as well as build and sustain partnerships with service providers and local communities.

Policy research analysis in this area has arguably been neglected, with research in the field predominantly focused on architectural design and program elements of shared schools. Limited attention has been paid to the challenges involved with coordinating social infrastructure provision (McShane and Wilson 2017), or the intersections of education, social and urban policy and planning (Vitiello 2006). This lack of researched into policy analysis may have had a significant impact on schools as community hubs – or the lack of formal policy associated with such entities and partnerships.

Informed by Bacchi's (1999) concept of policy as constituting or representing problems, this paper contributes to filling this policy research gap by discussing the policy determinants and dynamics associated with developing schools as community hubs. Using complimentary performative and enactment perspectives (Ball, Maguire & Braun, 2012), the paper analyses a schools as community hubs project: Yuille Park (Prep to Year 8) Community College, located in Wendouree, in the central Victorian City of Ballarat. This case study example demonstrates the 'problem' of a significantly disadvantaged community, while showing the contingency of policy-making 'on the run', evident in the gap between formal written policy issued by government and the local adaptation and enactment of policy in this particular community setting. This example, it is argued, highlights conceptual and methodological challenges of policy research in the field.

Interpretative Policy Approaches

Working Back from the Problem

Bacchi's (1999, 2006, 2012; Bacchi & Goodwin 2016) 'What is the Problem Represented to be?' (WPR) framework provides a critical interpretative policy analysis approach that offers utility as a resource, or tool, to facilitate interrogation of public policies, including those associated with school as community hubs. WPR is intended to make clear that the point of the analysis is to begin with postulated 'solutions', such as policies, in order to tease out and critically examine their implicit problem representations. Bacchi expands with the following questions guiding analysis:

1. What / 'Problem(s)' are represented?
2. Presuppositions, Assumptions ?
3. How did / Representation Evolve?
4. What is / Unproblematic?
5. What can be / Thought differently?
6. What / Effects produced?
7. What is / Questioned, disrupted and replaced? (Bacchi, 2012)

Performative and Enactment Policy

As the case of Yuille Park shows, policy may not necessarily be formalised, authorised, or sometimes even written down. However, it is possible to identify a set of texts and practices, central-level policy directives, local adjustments and adaptations, to identify what was 'problematised' and how the framing of this problem shaped the evolution and outcomes of the project. As described in some detail below, a significant feature of the Yuille Park project was what Ball et al. (2012) refer to as performative, or enacted policy, where key central policy mandates are interpreted and enacted locally, and local policy developed to respond to silences and gaps created by the centre.

Policy Case Study: Yuille Park P-8 Community College, Wendouree, Victoria, Australia

In the Australian context, Yuille Park is illustrative of an interruptive education-community model that was planned, programmed, and designed to what was represented as the specific service needs of its community. It opened June 2008 as an exemplar 'school as community hub'. Its genesis was the closing of two schools, Grevillea Park and Yuille Primary, which were amalgamated to become a new education-community hub pilot, with twenty-two community service functions. Significantly, a pre-school operated by Uniting Care and Wendouree West Community House were relocated to the site to become 'Wendouree West Community Learning Hub', a "whole-of-life" learning and community centre. Today, Yuille Park continues to be used seven days a week by school and community groups:

The shared facilities include: meeting, conference, training, interview rooms; library; large multipurpose space designed for school assemblies; indoor sports (including basketball half court),

functions and performances; home economics kitchen, and canteen space; art studio, and materials technology workshops complete with segregated storerooms; music activity, band practice, editing suite' (Department of Education and Training, 2020).

The following account arises largely from resources and direct experience from my work with the architectural firm that planned, designed, coordinated delivery and led post occupancy evaluation for Yuille Park.

Policy Contexts

The policy narrative at Yuille Park begins with the 'problematisation' of a failing neighbourhood. The suburb of Wendouree West was originally built to accommodate rowing athletes for the 1956 Summer Olympics. Prior to the Yuille Park project commencing Wendouree West remained run down, featuring boarded up shop fronts and poorly maintained infrastructure. Petty crime, unemployment, student truancy (often greater than 50%), and poor community mental health were among long-term challenges.

The implications of this situation became interventions led by education, where new infrastructure investment by State Government generated alignments with a community partnership focus on disadvantage. This policy problematisation, and its focus on human and social capital and service engagement, superseded earlier policy interventions (including crime and welfare entitlements/work activity) that saw the problem as individual and cultural.

Adaptive Education and Community-enacted Policy

An integrated, education-led, community policy model was fundamental to Yuille Park's planning and facility delivery. This policy platform was an outcome of community consultation and collaboration from which the outcomes at Yuille Park can be seen as contingent. As an enacted policy process, this may be seen as the project's most significant policy achievement. The creation of 'policy on the run' was essential for achieving community consensus around services selection, programming, site planning, design options, operations, and facility management.

Community consultation and planning for Yuille Park began in 2001, seven years before the school and community hub eventually opened in 2008. The brief for the amalgamated school developed from both formal and informal participatory community engagement, through phases that loosely corresponded with feasibility, master planning, and functional briefing.

Customised Education Policy

Interdepartmental Advocacy: State government advocates from both Education and Community were pivotal to a locally determined brief that achieved a high level of community consensus. Atypically leaders, willing to take calculated risks, from the Department of Education and Early Childhood Development (DEECD)/Department of Education and Training (DET) and Department of Health and Human Services (DHHS) worked pro-actively to bring their agendas together, supporting locally generated

solutions.

Responsive Pedagogy and Customised POD Learning Environment: With respect to school operations and learning, an adaptable education policy enabled the development of a customised 'learning hub pedagogy' that was supported by a 'pod' learning hub architectural solution that allowed for individual, group and specialist learning within an interdisciplinary environment. A team-teaching approach was planned and designed, with buildings accommodating learning communities for Grades Prep-2, 3-5, and 6-8. The shared teaching environments were facilitated through connectivity with staff work areas, both visually and physically. The learning spaces also included outdoor landscapes, multi-sport environments and a Stephanie Alexander Kitchen Garden, providing nutritious food that was used for student breakfasts and lunches, prepared at the shared commercial and community kitchen at the heart of the Centre

As a relatively unknown pedagogical model in the State at the time, its adoption required trust-based leadership at local and State level. With support from DEECD, the school Principal led the 'new' learning hub pedagogy, working closely with a predominantly new and enthusiastic teaching cohort.

Policy Enactment for Skills, Training and Local Employment

In addition to primary and middle school education (P-8), adult education on site was supported by DHHS. Employment training, with a focus on technology skills, became popular, supported by the development of a shared learning space connected to the community library. The employment program became successful, supporting community members with skills for new roles at Yuille Park, as well as in the wider community.

Flexible Procurement Policy

Over the unusually long consultation and planning period, year-on-year funding was budgeted by the Department of Treasury and Finance in response to emerging needs that were agreed by DEECD and DHHS. The acceptance of a longer than typical timeframe allowed planning and architectural design teams to be engaged earlier and for longer, enabling deeper engagement with members of the community, state department representatives and school leaders. This approach supported various forms of adaptation and refinement, as local needs were determined and suitable design responses created and iterated. For example, the master planning process generated new neighbourhood transport connections to a new railway station and upgraded public space. These transport and recreation nodes later became locations for student-produced art installations, representing community identity and pride.

Neighbourhood Uplift: The school's opening became a catalyst for new housing development, which continued to expand from the surrounding streets over subsequent years. Residential upgrades also stimulated economic activity for the neighbouring commercial street.

Policy Gaps

Policy failure: Overcoming years of disadvantage and poor socio-economic conditions

Yuille Park can be seen as the consequence of historic policy failures that prolonged long-term unemployment and disadvantage, evidenced by consistently low socio-economic demographic data and conditions until recent years.

The problematisation realised and responded to by policy enactment through the process of Yuille Park's community centred planning process ultimately filled policy gaps and failures to generate a place of community activity, pride, employment over the course of the past decade. Yuille Park represents investment in, and development of, social capital for what is now proclaimed as a 'whole of life' community centre (DET, 2020). It is notable that no detailed written policy precedents, beyond the standard education and community health policies, were available to guide social infrastructure development when Yuille Park was developed. Subsequently some written policy advocacy has occurred retrospectively (Department of Education, 2010, 2015), capturing some, but not all, of the lessons learned.

Yuille Park attracted Prime Ministerial visitation and support (Prime Minister Gillard) and attracted many local, interstate and international visitors in the first few years of operation. Furthermore, the project was recognised with school design awards (from the Victoria State Government and Council of Education Facility Planners International – now Learning Environments Australasia), and received recognition for its urban community transformation and design (from the Urban Design Institute of Australia).

Toward Integrative Policy Futures

As a case study, Yuille Park's interpretative policy narrative provides opportunity for applying Bacchi's (1999, 2006, 2012; Bacchi & Goodwin 2016) 'What is the Problem Represented to be?' (WPR) framework. WPR policy analysis reveals vital perspectives of policy determinants, such as those 'all-too-complicated' integrative policy arrangements common to schools as community hubs. Despite fragmentation and a lack of pre-determined policy coordination, the skill and continuity of key actors gave rise to a range of coordinated solutions across service provision, urban planning and facility design that has made a difference to a struggling community, generating neighbourhood uplift. Yuille Park represents investment in, and development of, shared resources that have aided the development of social capital in the area. The development of a 'whole of life' community centre (DET, 2020) has helped tackle complex intergenerational challenges, where less holistic policy approaches had previously failed – having (perhaps) mis-represented the problem(s).

References

Bacchi, C. L. (1999). *Women, Policy and Politics*. SAGE.

Bacchi, C. (2009). *Analysing Policy*. Pearson Higher Education AU.

Bacchi, C., & Goodwin, S. (2016). *Poststructural Policy Analysis*. Springer.

Ball, S. , J., Maguire, M., & Braun, A. (2012). *How Schools Do Policy.* Routledge.

Bacchi. C. (2012). Introducing the 'What's the Problem Represented to be?' approach. In Bletsas, A., & Beasley, C. (Eds.), *Engaging with Carol Bacchi.* (pp. 21-24). University of Adelaide Press.

Brian, H., & Kate, C. (2018). Policy analysis in Australia. Policy Press.

Cleveland, B. (2016). *A school but not as we know it! Towards schools for networked communities*, Australian Association for Research in Education (AARE) Conference 2016.

Cleveland, B. & Woodman, K. (2009). *Learning from past experiences: School building design in the 1970s and today*, 58-67. In Newton, C. and Fisher, K. (Eds.). TAKE 8. Learning spaces: The transformation of educational Spaces for the 21st century. Manuka, ACT: Australian Institute of Architects.

Colebatch, H. , Hoppe, K.R. & Noordegraaf, M. (2010). *Working for Policy*. Amsterdam University Press.

Colebatch, H. (2009). *Policy.* McGraw-Hill Education (UK).

Crato, N., & Paruolo, P. (2018). *Data-Driven Policy Impact Evaluation*. Springer

Davis, P., & Lay-Yee, R. (2019). *Simulating Societal Change*. Springer.

Department of Education and Early Childhood Development (2010). *Schools as Community Hubs. Melbourne*. State Government of Victoria.

Department of Education., (2015). *Co-location and other integration initiatives: Strategic Evaluation A. Summary Report*. State of Victoria (Department of Education and Training).

Department of Education and Training (2020). *Yuille Park Community College Living to Learn, Learning to Live*. https://www.yuilleparkcc.vic.edu.au

Dovey, K., & Fisher, K. (2014). *Designing for adaptation: the school as socio-spatial assemblage*. The Journal of Architecture, 19(1), 43-63.

Lawson, H. , A., and Veen van, D. (2015). *Developing Community Schools, Community Learning Centers, Extended-Service Schools and Multi-Service Schools*. Springer.

McShane, I (2006) *Social Value and the Management of Community Infrastructure,* National Council of the Institute of Public Administration Australia.

McShane, I. (2006). *Community facilities, community building and local government - an Australian perspective*. Facilities, 24(7/8), 269-279.

McShane, I., Cole, N., Watkins, J. & Meredyth, D. (2013). *Opportunity Spaces, Community Engagement in the Planning*, Use and Governance of Shared School Facilities Working Paper #1.

McShane, I. & Wilson, C.K., (2016). *Opportunity Spaces, Community Engagement in the Planning, Use and Governance of Shared School Facilities Working Paper #4*. Project to Partnership –Sustaining Shared School Community Infrastructure Projects. DRAFT 160322. Retrieved from https://oppspaces.files.wordpress.com/2017/05/wp4-project-to-partnership-160607.pdf

McShane, I., & Wilson, C. K. (2017). *Beyond the School Fence: Rethinking Urban Schools in the Twenty-first Century*. Urban Policy & Research, 35(4), 472-485. doi:10.1080/08111146.2017.1310098

Kraft, M. E., & Furlong, S. R. (2020). *Public Policy.* CQ Press.

Mulcahy, D. (2014). *Reassembling spaces of learning in Victorian government schools: Policy enactments, pedagogic encounters and practical politics*. Discourse: Studies in the cultural politics of education, Online, 1-15. doi: 10.1080/01596306.2014.978616

Mulcahy, D. (2016). *Policy matters: de/re/territorialising spaces of learning in Victorian government schools*. Journal of Education Policy, 31, 81-97.

Tayler, C. P., Farrell, A., & Tennent, L. (2002). *Integrated service hubs: Potential outcomes for children and families:* AARE, 2002.

Vitiello, D. (2006). *Re-Forming schools and cities: Placing education on the landscape of planning history*. Journal of planning history, 5(3), 183–195.

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UNDERSTANDING THE DEVELOPMENT AND IMPLEMENTATION OF SCHOOLS AS COMMUNITY HUBS (SaCH): A CASE STUDY APPROACH

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Abstract

There is increasing interest in schools as community hubs, both within Australia and at an international level. In the Australian context service provision, the role of infrastructure, as well as the implications of these spaces for community engagement are some of the challenges when implementing community hubs. This paper will provide a research overview of the work being undertaken by the author to investigate the development and implementation of schools as community hubs. Based on a case study approach, the aim is to understand the processes, challenges, successes, needs and opportunities of schools and their communities.

Keywords: community hub, school facilities, school infrastructure, case study, space

Understanding the Development and Implementation of Schools as Community Hubs (SaCH): A Case Study Approach

Community centres have been a feature of Australian culture for more than 100 years with the vision and intended purposes changing and adapting to the community over time. As Lewi et al. (2010) noted, in the 1920s residents demanded spaces like community centres to socialise in their spare time after working hours, while during the 1940s the vision moved towards more inclusive and family-oriented spaces. Nowadays, this vision has been re-shaped in the form of 'community hubs' bringing together a variety of municipal services into a central location.

In recent decades, as cities have grown, local governments have been under pressure to provide services to the community particularly in urban fringe areas, where land space to build new infrastructure is scarce (Infrastructure Australia, 2019). For that reason, schools are gaining significant attention concerning how their infrastructure can serve as community facilities. The current underutilisation of school infrastructure outside school hours (Cleveland & Woodman, 2009; Infrastructure Australia, 2019) means there are opportunities to maximise these spaces to include the community as users and participants of the school environment and to deliver services and programs for them. Moreover, the school system is expected to develop connections between families, schools and communities that can be addressed through schools as community hubs (McShane et al., 2012). Australian schools are therefore regarded as having the potential to provide more than just spaces for the education of children, but to become spaces that welcome the whole community to provide them with the necessary infrastructure and services to flourish.

This paper provides a research overview of the work being undertaken by the author to investigate the development and implementation of schools as community hubs in the Australian context, aiming to understand the processes, challenges, successes, needs and opportunities of schools and their communities.

Background

As part of society, schools play a fundamental role not only in their knowledge transmission and skills acquisition roles but also through introducing children and youth into the dynamics of socialisation (Biesta, 2015). Schools developing strategies and programs to engage with families and surrounding community are not a new idea, and there have been different approaches and rationales behind the implementation of school-community relations (Cleveland. B, 2016; Dryfoos et al., 2005; McShane et al., 2012).

Terminology to define approaches to schools linked with the community is extensive. A review of the literature of US, UK, and Australia reveals that some of the most common nomenclature includes full-service community school, community school, full-service extended schools, extended school, and school

integrated services. In the case of Australia, the term school as community hub (SaCH) is widely used, as McShane et al. (2012) note, indicating a spatial, educational and social planning articulation.

Regarding school-community partnerships, Australia shares some commonalities with the UK and US models. This includes an engagement with an improvement of the students' learning outcomes, strengthening the relationship between the school, home and community, and coordination and collaboration between agencies and other service providers to deliver service's (Semmens & Stokes, 1997). Furthermore, Black (2008) emphasises in her definition the role of community as the protagonist of the educational process and not only as a 'recipient' of programs and benefits:

> We need new models of schooling that recognise the future of children and young people is the responsibility of the whole community, and which form the basis of a social alliance for all young people to take an active—if not a leading— role in their community (Black, 2008, p. 15).

A distinctive characteristic in the Australian context, as described by McShane et al. (2012) is the governmental concern about 'infrastructure efficiency'. This rationale seeks to provide a community benefit through schools, at the same time as optimising investment through the promotion of multipurpose buildings with service integration. The latter might arise as a response to prior claims of widespread dissatisfaction with service provision, which was viewed by many as inflexible or inappropriate for contemporary community necessities (Tayler et al., 2002). The latest Australian Infrastructure Audit (2019) recognises this claim as problematic, pointing that 'the complexity of systems in place to enable shared use of space can also deter community members from engaging with schools' (p. 419).

Sanjeevan et al. (2012) highlight some critical challenges for the development of future community hubs. These include the need for more holistic and in-depth understandings of how community hubs can emerge, the appropriateness of the design of school buildings and the suitability of strategies for managing community access. The literature reveals that research has been addressed mainly from the perspectives of experts, professionals and practitioners (Kerr et al., 2016), overlooking the representation of community perspective regarding the development and implementation of such initiatives.

The project described in this paper aims to investigate the development and implementation of schools as community hubs in the Australian context to understand the processes, challenges, successes, needs and opportunities of schools and their communities. The research question that will drive the project is: How are schools as community hubs being produced through the interplay of planning, design, governance and management?

Research approach

Research will be undertaken via a series of case studies that will focus on community hub schools in the eastern states of Australia: Victoria, New South Wales, South Australia and Queensland. It will seek insights into the dynamics of their functioning, connecting the processes of planning and designing new

facilities for communal use with the governance and management approaches underpinning the use of these facilities. This inquiry is based on a qualitative approach that seeks to understand, using Merriam and Tisdell's model that explores: (1) how people interpret their experiences, (2) how they construct their worlds, and (3) what meaning they attribute to their experiences. "The overall purpose is to understand how people make sense of their lives and their experiences" (Merriam & Tisdell, 2016, p.24).

Furthermore, as suggested by Miles (2015), the case study approach facilitates new ways to study complex practices, allowing analytical study bounded by spatial and temporal elements contributing to a deeper understanding of what is being investigated. A similar approach to this was adopted by Rose et al. (2009) in their UK study of extended schools. The authors highlighted that:

> ...the verification of experiences across case studies enabled the researchers to provide the study schools with information about consistency of practice, the experiences of individuals and the impact upon identified needs illuminated by exemplars' (2009, p.59).

The conceptualisation of space

This study will engage with an analysis of SaCH through a spatial lens, providing a research perspective that has not received much attention. As Gruenewald (2003) suggested, the emphasis on accountability in the educational context has little consideration of the role of space or place, failing to recognise the role of school in the production of space, through the interaction between schooling and community life. This perspective will be helpful considering the writer's interest in exploring the experiences of schools engaging with the wider world through facilities that offer/accommodate programs and services for the benefit of children, families and members of the wider community.

The case study design will be approached using the ideas of the French philosopher and sociologist Henri Lefebvre whose seminal work 'The Production of Space' remains highly influential in understanding the role of space in urban, architectural and design studies (Buser, 2012; Butler, 2012; Merrifield, 1993; Middleton, 2017; Watkins, 2005). In 'The Production of Space' Lefebvre (1991) developed his conceptual understanding of space to highlight that space is a social product that is the result of social action, practices and relationships, and at the same time is part of them. Lefebvre proposed to think of space as 'the physical space (nature), mental space (formal abstractions about space), and social space (the space of human interaction)' (Merrifield, 2006, p. 102). By bringing together the idea of multiple natures of space, Lefebvre aimed to understand space and its relations through the 'dialectical character of their interaction' (Merrifield, 1993, p. 523).

This project will engage with space from a comprehensive point of view that considers not only the voice of experts regarding SaCH (conceived space) but also how their users and workers are experiencing these spaces (lived experience) and observing the daily reality of SaCH (perceived space). In acknowledging these three dimensions, the aim of the research is to recognise the different perspectives

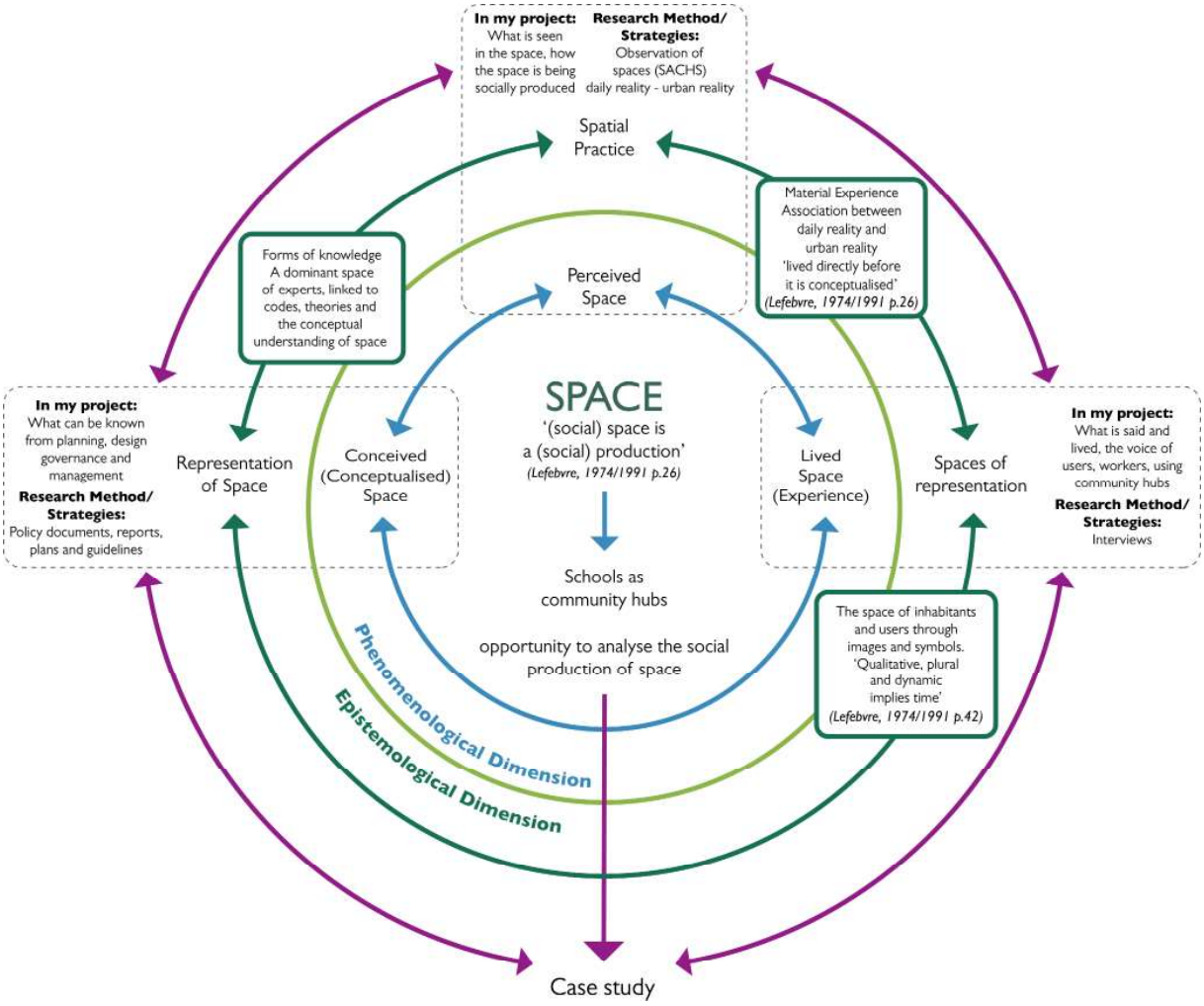
of how the connections/disconnections and relationship between spatial practices and representations of space and spaces are shaping the experience of community hubs. This may reveal possible contested views of the research problem. Figure 1 offers an overview of how Lefebvre's conceptual understanding of space will work in the context of the project.

Rationale for case study selection

Schools will be selected on a purposive sampling basis, meaning that sites will be selected based on whether they meet criteria concerning the kind of cases needed to address the research questions (Bryman, 2012). In the context of this study, schools working as a community hub in shared or co-located facilities or a group of schools working as a cluster to offer services to the community will be considered

Figure 1

Conceptual Overview of the Research Project



Source: By author.

as SaCH. Interviews with key informants will be conducted to identify potential cases, with the following characteristics:

- Schools with an explicit vision to work as a community hub or including the community as one of the main actors in their school vision statement
- Schools working in partnership with different organisations to provide services and programs to the community (local authorities and/or non-government agencies)
- Schools recognised as exemplars in their work and relationship with their community
- School willingness to share practices and to participate in a research project

Data collection

The data for the cases studies will be drawn from a variety of sources to improve data triangulation (Yin, 2014). Considering the nature of the cases and the central role that space plays in the development and implementation of social infrastructure/community hubs, data collection methods will be organised using Lefebvre's conceptualisation of space as detailed in Table 1.

Table 1

Data Collection Overview

Lefebvre's epistemological perception of space	**How this is understood in the context of this project**	**Data collection process**
Representations of space	What can be known from planning, design, governance and management	*Focus groups:* experts and practitioners in education, planning and architecture, government representatives, NGO representatives, Building Connections project partners. (Plan A: face-to-face Plan B: virtual meetings) *Document analysis contextualisation:* documents related with the design and implementation of SaCH cases.
Spaces of representation	What is said and lived, the voice of users, workers, using community hubs	*Interviews*: School leaders, teachers, students, families, hub users, hub leaders or community hub coordinators and users. (*Plan A*: face to face. *Plan B*: virtual meeting plus photo-elicitation (Tonge et al., 2013)
Spatial practices	What is seen in the space, how space is being socially produced	*Site observation*: SaCH in use, observation of facilities

Conclusion

This paper outlined the research process being undertaken by the author to investigate the development and implementation of schools as community hubs in the Australian context. The aim is to understand the processes, challenges, successes, needs and opportunities of schools and their communities. Multiple case studies will focus on Australian schools as community hubs. The research will provide new knowledge into the fields of design, architecture, education, and social planning, producing an in-depth and detailed examination of the experiences of SaCH, to gain a more comprehensive understanding of how schools can develop as whole-of-community resources.

References

Arthur, J., & Bailey, R. (1999). *Schools and Community: The Communitarian Agenda in Educatio*n. Taylor & Francis Group. http://ebookcentral.proquest.com/lib/unimelb/detail.action?docID=167286

Biesta, G. (2015). *What is Education For? On Good Education, Teacher Judgement, and Educational Professionalism*. European Journal of Education, 50(1), 75–87. https://doi.org/10.1111/ejed.12109

Black, R. (2008). *Beyond the classroom: Building new school networks*. ACER Press.

Bryman, A. (2012). *Social research methods (4th ed)*. Oxford University Press.

Buser, M. (2012). *The production of space in metropolitan regions: A Lefebvrian analysis of governance and spatial change*. Planning Theory, 11(3), 279–298. JSTOR. https://www.jstor.org/stable/26004272

Butler, C. (2012). *Henri Lefebvre: Spatial Politics, Everyday Life and the Right to the City*. Taylor & Francis Group. http://ebookcentral.proquest.com/lib/unimelb/detail.action?docID=1047118

Cleveland, B. (2016). *A School but Not as We Know It! Towards Schools for Networked Communities*. Annual Meeting of the Australian Association for Research in Education (AARE).

Cleveland, B., & Woodman, K. (2009). *Learning from past experiences: School building design in the 1970s and today*. http://minerva-access.unimelb.edu.au/handle/11343/192434

Dryfoos, J. G., Quinn, J., & Barkin, C. (2005). *Community schools in action lessons from a decade of practice*. Oxford University Press.

Gruenewald, D. A. (2003). *Foundations of Place: A Multidisciplinary Framework for Place-Conscious Education*. American Educational Research Journal, 40(3), 619–654. http://www.jstor.org/stable/3699447

Infrastructure Australia. (2019). *An Assessment of Australia's Future Infrastructure Needs. Australian Government*. https://www.infrastructureaustralia.gov.au/publications/australian-infrastructure-audit-2019

Kerr, K., Dyson, A., & Gallannaugh, F. (2016). *Conceptualising school-community relations in disadvantaged neighbourhoods: Mapping the literature*. Educational Research, 58(3), 265–282. https://doi.org/10.1080/00131881.2016.1207872

Lefebvre, H. (1991). *The production of space*. Blackwell.

Lewi, H., & Nichols, D. (Eds.). (2010). *Community: Building modern Australia*. UNSW Press.

McShane, D. I., Watkins, A. J., & Meredyth, D. (2012). *Schools as Community Hubs: Policy Contexts, Educational Rationales, and Design Challenges.* 1–14, AARE Conference 2012.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative Research: A Guide to Design and Implementation (Fourth edition)*. Jossey-Bass.

Merrifield, A. (1993). *Place and Space: A Lefebvrian Reconciliation*. Transactions of the Institute of British Geographers, 18(4), 516–531. JSTOR. https://doi.org/10.2307/622564

Merrifield, A. (2006). *Henri Lefebvre: A critical introduction*. Routledge.

Middleton, S. (2017). *Henri Lefebvre on education: Critique and pedagogy*. Policy Futures in Education, 15(4), 410–426. https://doi.org/10.1177/1478210316676001

Miles, R. (2015). *Complexity, representation and practice: Case study as method and methodology*. Issues in Educational Research, 25(2), 309–318.

Rose, R., Smith, A., & Feng Yan. (2009). *Supporting pupils and families: A case study of two English extended secondary schools*. Management in Education, 23(2), 57–62. https://doi.org/10.1177/0892020609104811

Sanjeevan, S., McDonald, M., & Moore, T. (2012). *Primary Schools as Community Hubs: A review of the literature*. The Scanlon Foundation.

Semmens, R., & Stokes, H. (1997). *Full service schooling for full citizenship: From theory to practice*. Melbourne Studies in Education, 38(2), 115–130. https://doi.org/10.1080/17508489709556304

Tayler, C., Farrell, A., & Tennent, L. (2002). *Integrated service hubs: Potential outcomes for children and communities?* AARE Annual Conference, Brisbane.

Tonge, J., Moore, S., Ryan, M., & Beckley, L. (2013). *Using Photo-Elicitation to Explore Place Attachment in a Remote Setting*. Electronic Journal of Business Research Methods, 11(1), 41–50. https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=bth&AN=92610703&site=eds-live&scope=site&custid=s2775460

Watkins, C. (2005). *Representations of Space, Spatial Practices and Spaces of Representation: An Application of Lefebvre's Spatial Triad. Culture and Organization*, 11(3), 209–220. https://doi.org/10.1080/14759550500203318

Yin, R. (2014). *Case Study Research Design and Methods (5th ed.)*. SAGE.

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MAKING IT WORK: MAKERSPACES, MAKER COMMUNITY AND HIGH SCHOOL PARTNERSHIPS

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Abstract

This study examines the benefits and challenges of creating partnerships between schools and their local maker community. Makerspaces are dedicated facilities for individuals to create products with specialised tools that vary greatly in different spaces. This paper focuses on makerspaces with technologies that facilitate fabrication. Based on interviews, we describe the benefits and challenges of makerspace-high school partnerships and the potential partnership between makerspace and technical schools. In high schools, makerspaces provide students with equipment to discover problems, explore ideas and gain self-confidence. In the community, makerspaces provide patrons with opportunities to develop making skills, collaborate, generate new economic activity, and build community. Despite having similar objectives, the needs of high school makerspaces and public makerspaces are vastly different. Hence, school-makerspace partnership attempts in Victoria, Australia have often been difficult to implement and more importantly, sustain.

Keywords: maker community, school partnerships, makerspaces, tech school

Making it Work: Maker Community and High School Partnerships

Over the last two decades, the Maker Movement has witnessed tremendous growth around the world. In Australia, this growth is evident in the appearances of makerspaces in local communities (Deloitte Australia, 2014), public libraries (Boyle et al., 2016), universities (Wong & Partridge, 2016) and schools (Education Services Australia, 2018). This is unsurprising, as researchers have identified plenty of benefits associated with makerspaces. Examples include helping individuals develop self-awareness (Fasso & Knight, 2020), offering new learning opportunities (Hsu et al., 2017), and fostering communities (Taylor et al., 2016). While most existing research has looked at how makerspaces support their users, few have examined how different makerspaces support each other. This provides the motivation for us to examine the supporting relationships between different makerspaces. In this study, we report thematically the benefits and challenges of partnerships between public makerspaces, high school makerspaces and technical schools in Victoria, Australia.

Background

This section briefly describes high and technical school makerspaces as their focus on the act of making situates them within the larger Maker Movement community. While these spaces operate differently, they have a common agenda of empowering users to learn through making.

Makerspaces are physical spaces where individuals gather to make. Whilst this broad term covers a range of spaces and activities, from pottery and music-making to jewellery workshop and men's shed, this paper focuses on makerspaces with fabrication activities such as wood working, product prototyping and electronics. Dougherty, recognized as the founder of the maker movement (Corcoran, 2015), popularized the term to represent "publicly-accessible places to design and create" (Cavalcanti, 2013). As there are no spatial criteria for a makerspace, the name is often used simply as a label (Blikstein, 2018). Hence, a more useful way of recognizing a makerspace is that its users adopt a maker mindset, which is, to engage in iterative experiential learning to turn abstract ideas into tangible outcomes (Dougherty, 2013).

It is this iterative experiential learning that makes makerspaces appealing to schools and educators. The making mindset and activities, coupled with a physical space and making equipment, becomes a "powerful context for learning" (Regalla, 2016, p. 257) for students and teachers. Built on the constructivist foundation of "learning by doing" (Dewey, 1986), making offers students opportunities to STEM-rich integrative curriculums (Bevan, 2017). Despite its promising contributions to students' learning experience, school administrators need to first overcome the challenge of maintaining such spaces in schools (Blikstein, 2018), before their students can reap the learning rewards.

Technical schools now have high-tech learning centres established by the Victorian government (Department of Education and Training Victoria, 2018). Students from neighbouring schools visit and

participate in education programmes as part of their learning curriculum. Such programmes offer students problem-based activities that are reflective of the local industry and students use the centre's equipment to explore and prototype solutions.

Through these making activities, students can experience the full extent of STEM education, using the toolsets, building the technical skillsets and developing growth mindsets.

Method

Aside from an online post (Time Out, 2016), there is no locally made online directory of makerspaces in Victoria, Australia. Hence, we referenced the directory of community makerspaces from Hackerspaces (Hackerspace, 2020), an international network that list makerspaces globally. We contacted all of them due to there being only a small sample size.

Six of the contacted eleven makerspaces responded and consented to an online semi-structured interview. Four of the six interviewees were makerspace founders, with the other two being a general manager and a committee member. Three of these makerspaces were volunteer-run and the other three were commercial organisations (refer to Table 1). All the makerspaces were founded between 2009 and 2019. Our questions focused on community needs, as described in the *Schools as Community Hubs Development Framework - Workshop 1 Emerging Themes & Insights* (Chandler & Cleveland, 2020). Specifically, we asked interviewees about their needs and offerings regarding equipment, space, and expertise.

Next, we used snowballing (Goodman, 1961) and purposive sampling to recruit interviewees from the school sector. This approach was to ensure interviewees had previous engagement with public makerspaces and to represent a diverse sample of schools. Of the six interviewees, two were from

Table 1

Interviewees and their Context

Interviewee	Context
Interviewee #1	Volunteer-run makerspace
Interviewee #2	Volunteer-run makerspace
Interviewee #3	Volunteer-run makerspace
Interviewee #4	Commercial makerspace
Interviewee #5	Commercial makerspace
Interviewee #6	Commercial makerspace
Interviewee #7	Tech Schools
Interviewee #8	Tech Schools
Interviewee #9	Independent high school
Interviewee #10	Independent high school
Interviewee #11	Public high school
Interviewee #12	Public high school

technical schools, two from public secondary schools and two from independent secondary schools (see Table 1). The research team are makers and educators, bringing first-hand experience in makerspace and high school environments to this project. Our expertise aligned the interview scoping questions to probe the schools' needs and offerings from the maker community.

Findings

Despite sharing the same maker culture and situated within the broader Maker Movement community, public makerspaces still face challenges when trying to collaborate with high school makerspaces and tech schools. We summarise their community needs and offerings in Table 2 and elaborate below.

Can I use your equipment?

The makerspaces we focused on have sufficient equipment to satisfy their members' needs. The machines are either second-hand purchases, loaned by members, or purchased by the committee to satisfy the particular needs of their members. Based on the authors' experience, when makers are limited by making equipment, the makers find their way around the limitations and, in doing so, gain new making techniques.

While school makerspaces have equipment that is useful for makers, the restrictive conditions render these facilities unsustainable for regular use. For example, time restrictions that adhere to school schedules and staff availability do not always fit in with the needs of the makers. When asked about allowing makers to use school makerspace facilities, interviewee #12 said that operating their makerspace "would need some sort of coordinator. Effectively they [makers] would be paying for a product or a service". Though facilities are useful, they may not necessarily be suitable for makers. As interviewee #8 pointed out, "the equipment that students will use, like classroom technology, it's often quite different to the sort of maker technology".

Can I access your space?

While additional space can help accommodate more members, being able to access the space was more crucial than the space itself. Volunteer-run makerspaces are open when their volunteers are available. This often falls on weekday evenings or weekends. These operating hours must then coincide with the member's available time, for members to visit and use the makerspace. As interviewee #5 pointed out, "people in the community want to be able to come whenever, ideally, and not just limited to 'this-hour'."

While school makerspaces may have the floor space for the makers to use, their access times further restricts the already limited period when volunteers and makers are both free to work in the makerspace. As interviewee #11 said, "you got a very narrow window of maybe 2 hours, maybe 3 hours

tops between 5pm – 8pm where you might be able to get something done. Really the school is off limits at most other times." This is supported by interviewee #7, who said "For us it [technical school space] is used 6 hours, but it would be great to have it used 12 hours" but later added that "schools are very busy doing what they do".

For makers, working between their local makerspace and a school makerspace is unrealistic. As interviewee #5 pointed out, when working on projects, "you need dedicated space for that purpose. You can't just go set it up for a few hours and then pull it down. It's going to waste a lot of time".

Can I ask for your advice?

Public makerspaces do not pursue any specific demographics and thus attract people with various expertise. As interviewee #2 mentioned, the makerspaces are "more of a focal point for people with [different] kinds of skills or sort to share their knowledge". In fact, the school engagements discussed by the makerspace interviewees were mostly initiated when one of their members, either a high school or technical school teacher, saw an opportunity where the makers' knowledge could benefit their workplace. From the interviewees, the engagements included advising on planning of makerspaces, strategic

Table 2

Needs and offerings of public makerspaces, high school makerspaces and tech schools

		Needs	Have to offer
Makerspace	*Equipment*	1. advanced technologies 2. learning kits	1. experimental equipment
	Expertise	-	1. equipment expertise 2. making expertise 3. authentic expertise
	Space	1. more accessible space	-
High school makerspace	*Equipment*	-	1. learning kits
	Expertise	1. equipment expertise 2. making expertise 3. operational safety 4. authentic learning scenarios	1. teaching techniques 2. curriculum development
	Space		
Tech schools	*Equipment*	-	1. advanced technologies
	Expertise	1. authentic learning scenarios 2. curriculum development	1. equipment expertise 2. making expertise 3. operational safety
	Space	-	-

Note: This table captures the common needs and offerings of the different spaces. This may vary between spaces.

purchase of equipment and development of authentic curriculums.

As expected, high schools and technical school interviewees flagged that there were many areas where the maker's expertise could benefit their workplace, both directly and indirectly. Directly, as interviewee #12 highlighted, "there is such a shortage of qualified technology teachers"; and indirectly, as interviewee #9 mentioned, where students "move outside the school environment to connect with industry experts [and] use their expertise in really powerful and meaningful ways".

While makers are open to helping one another, their efforts are finite. That is because most members have their full-time commitments and are using their leftover time to work on their projects. Makers use their makerspace to work on projects and learn from others during the process. Even when high school and technical school teachers join and participate in the makerspace, they cannot expect constant help from other experienced makers. After all, makers do not visit makerspaces to teach and guide others. As interviewee #5 said, "a lot of people are willing to share their expertise, but it's when it starts to become a drain on their personal time there's no way for them to get anything out [of the participation]".

Discussion

Despite the challenges listed above, all interviewees were still open to partnering with each other. For makerspaces, school partnerships can promote their community to a larger audience, attract new members to their communities, and bring in the much-needed funding through membership fees. For high schools and technical schools, makerspace partnerships can expose their students to real-world communities and contextualise their curriculums in authentic scenarios. The section below describes the opportunities technical schools can take to support their local makerspaces, and two conditions necessary for the partnership to be sustainable.

Tech School equipment, space and expertise

Despite being self-reliant, the makerspace interviewees were curious about the available equipment in technical schools. That is because technical schools house more advanced technologies that are often not viable for makerspaces to purchase. Being aware of these technologies may prove useful when a member's project requires a one-time use of an equipment not available in the makerspace. While school makerspaces need to prioritise their students, technical schools can respond to the maker community need as part of their objective to connect with their local industry. As interviewee #8 said, "we're developing our own makerspace … as another way for us to connect and interact with the local community". This may help local maker communities expand and accommodate more members. Finally, but unsurprisingly, we noticed that makers in makerspaces preferred working with technical schools because of their shared language. As interviewee #1 pointed out, "we mainly work with the technical

schools because they sort of understand us", and that "engage[ment] with that [high school] sort of level is completely different".

Short term v's long term

Volunteer-run makerspaces are cautious about committing long-term to work with schools. As interviewee #2 described, "we are completely volunteer run, so our availability is very haphazard". This is incompatible with the school's needs where, as interviewee #9 highlighted, "our [making] projects take a lot of time, and we still work within the restrictions of a timetable". However, most of the makerspaces had previous engaged with schools on short-term projects, such as showcase events and short learning courses, and continue to do so. As interviewee #1 said, "if it's one or two days or something, we could probably do that. But the longer period of time, it just becomes unmanageable for us because people are working full time and we would have to take people off work".

Reimbursement

While the makerspace interviewees were keen to help their neighbouring schools, the service rendered needs to be reimbursed. As interviewee #5 mentioned, "we don't want to be science teachers that aren't paid. We don't want to be technology teachers that aren't paid". Schools are aware of this too, as interviewee #9 mentioned, "obviously people are not going to give their time for free. And if you've got a niche capability you often struggle for money, and when they have an opportunity to make money, they will take it". This may become problematic for schools, as interviewee #12 mentioned, "They [external partners] need to be paid. You know, with all the good will in the world, they can't come down and spend a day or two with us". Even technical schools, established to form connections between industry and high schools, face a similar problem. Interviewee #7 mentioned, "we are funded to do a particular job" and that "anything we do outside of school hours requires us to look for additional funding sources."

Future works

For this paper, we reported only on the community needs and offerings affecting makerspace-school partnerships. From the interview data collected, additional findings indicated that smaller themes such as shared visions, funding models, and safety, also affected the viability of partnerships. Another research trajectory would be to explore how makerspace partnerships between schools can affect demographics such as age and gender in community groups.

To reveal the symbiotic relationship between schools and the maker community, other stakeholders within the maker landscape should be identified and examined, including makerspace coordinators in universities, public libraries, and museums. Discussions with the Department of Education and Training would also prove useful in order to further understand their vision for the role of making in the rapidly evolving STEM landscape and their action plan for providing making expertise to the schools.

While the interviewees identify as makerspaces, there were significant operational differences between them. This aligns with van Holm's (2014) perspective that makerspaces operate in different capacities, such as tinkerspaces, tech shops, and fablabs. Greater clarity on the different types of makerspaces can lead to stronger customisation of school partnership arrangements.

Way forward

Challenges are high when forming partnerships between public makerspaces and high school makerspaces. This is due to different objectives, users and needs. However, technical schools are advantageously positioned between the two, as they have unique technologies, knowledgeable staff, and can provide the community with access to their space and share a common language in the maker community. From the interviews, we identified that with appropriate funding, technical schools have the potential to mediate between makers and high schools. This potential arrangement would benefit students by providing them access to expertise, ideas and role-models from their community. In return, makers could gain access to a wider range of equipment in their neighbouring schools and tech-schools.

Ethics Declaration

Ethics application RESID3007 was approved by the Swinburne's Human Research Ethics Committee (SUHREC) for this research. Informed consent was obtained from all individual participants involved in the study.

References

Bevan, B. (2017). *The promise and the promises of Making in science education.* Studies in Science Education, 53(1), 75–103. https://doi.org/10.1080/03057267.2016.1275380

Blikstein, P. (2018). *Maker Movement in Education: History and Prospects*. Handbook of Technology Education, 419–437.

Boyle, E., Collins, M., Kinsey, R., Noonan, C., & Pocock, A. (2016). *Making the case for creative spaces in Australian libraries*. The Australian Library Journal, 65(1), 30–40. https://doi.org/10.1080/00049670.2016.1125756

Cavalcanti, G. (2013, May 22). *Is it a Hackerspace, Makerspace, TechShop, or FabLab? | Make: Make: DIY Projects and Ideas for Makers.* https://makezine.com/2013/05/22/the-difference-between-hackerspaces-makerspaces-techshops-and-fablabs/

Chandler, P., & Cleveland, B. (2020). *Schools as Community Hubs Development Framework: Workshop 1 Emerging Themes & Insights*. Building Connections: Schools as Community Hubs. https://doi.org/10.26188/12730940

Corcoran, B. (2015, May 27). *Dale Dougherty, Father of the Maker Movement Talks About Breaking Rules, Erasers & Building a Learning Culture—EdSurge News*. EdSurge. https://www.edsurge.com/news/2015-05-27-dale-dougherty-father-of-the-maker-movement-talks-about-breaking-rules-erasers-building-a-learning-culture

Deloitte Australia. (2014). *The Australian Maker Movement*. https://www2.deloitte.com/content/dam/Deloitte/au/Documents/technology/deloitte-au-tech-maker-movement-290514.pdf

Department of Education and Training Victoria. (2018, October 24). *Establishing Tech Schools*. https://www.education.vic.gov.au:443/about/programs/learningdev/techschools/Pages/techschoolsestablish.aspx

Dewey, J. (1986). *Experience and Education*. The Educational Forum, 50(3), 241–252. https://doi.org/10.1080/00131728609335764

Dougherty, D. (2013). *The Maker Mindset.* In M. Honey & D. E. Kanter (Eds.), Design, Make, Play: Growing the Next Generation of STEM Innovators (pp. 7–11). Taylor & Francis Group.

Education Services Australia. (2018). *Maker spaces. Digital Technologies Hub*. http://www.digitaltechnologieshub.edu.au/teachers/topics/maker-spaces

Fasso, W., & Knight, B. A. (2020). *Identity development in school makerspaces: Intentional design*. International Journal of Technology and Design Education, 30(2), 275–294. https://doi.org/10.1007/s10798-019-09501-z

Goodman, L. A. (1961). *Snowball Sampling*. Annals of Mathematical Statistics, 32(1), 148–170. https://www.doi.org/10.1214/aoms/1177705148

Hackerspace. (2020, June 11). *Hackerspaces in Victoria*. https://wiki.hackerspaces.org/Victoria

Hsu, Y. C., Baldwin, S., & Ching, Y. H. (2017). *Learning through Making and Maker Education*. TechTrends, 61(6), 589–594. https://doi.org/10.1007/s11528-017-0172-6

Regalla, L. (2016). *Developing a Maker Mindset. In K. Peppler, E. Halverson, & Y. B. Kafai (Eds.), Makeology: Makerspaces as Learning Environments* (Vol. 1, pp. 257–273). Taylor & Francis Group. https://doi.org/10.4324/9781315726519-17

Taylor, N., Hurley, U., & Connolly, P. (2016). *Making community: The wider role of makerspaces in public life*. Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, 1415–1425.

Time Out. (2016). *A guide to Melbourne's maker-spaces.* Time Out Melbourne. https://www.timeout.com/melbourne/things-to-do/a-guide-to-melbournes-maker-spaces

Van Holm, E. J. (2014). *What are Makerspaces, Hackerspaces, and Fab Labs?* SSRN Electronic Journal. https://doi.org/10.2139/ssrn.2548211

Wong, A., & Partridge, H. (2016). *Making as Learning: Makerspaces in Universities*. Australian Academic & Research Libraries, 47(3), 143–159. https://doi.org/10.1080/00048623.2016.1228163



Officer Secondary College.
Architecture by Clarke Hopkins Clarke. Photo by Rhiannon Slatter.

CLOSING PANEL

REFLECTIONS AND FUTURE PATHWAYS

To bring the issues and themes of the conference together and forecast future directions for research, policy development and practice, a panel discussion comprising Partners and Chief Investigators of the *Building Connections: Schools as Community Hubs* ARC Linkage project concludes the event.

Partner panel members comprise (in alphabetical order):

- **Simon Le Nepveu**, Partner, Clarke Hopkins Clarke Architects
- **Paul Meldrum**, Head of Learning Innovations, Catholic Education Diocese of Parramatta
- **Laurence Robinson**, Director, Brand Architects
- **Lee Sansom**, Assistant Director, New Schools Project, Department for Education, South Australia
- **Shirley Watters**, Director, Social Infrastructure Development, Infrastructure and Economic Resilience, Department of State Development, Infrastructure,Local Government and Planning, Queensland Treasury.

Chief Investigator panel members are (in alphabetical order):

- **Prof Janet Clinton**, Melbourne Graduate School of Education, University of Melbourne
- **A/Prof Ian McShane**, Centre for Urban Research, RMIT University
- **A/Prof Clare Newton**, Faculty of Architecture, building & Planning, University of Melbourne

Panel facilitator (Lead Investigator):

- **Dr Benjamin Cleveland,** Faculty of Architecture, Building & Planning, University of Melbourne



Sydhavnen Skolen Copenhagen. Architecture by JJW Architects. Photo by Clare Newton.

AUTHOR BIOGRAPHIES

IN ORDER OF PAPERS

AUTHOR BIOGRAPHIES

SCHOOL-CENTRED NEIGHBOURHOOD REVITALISATION IN BALTIMORE

Dr Ariel H. Bierbaum, MCP, PhD

Assistant Professor
University of Maryland, College Park

Dr Ariel H. Bierbaum is an assistant professor of urban studies and planning at the University of Maryland, College Park. Her work sits at the nexus of metropolitan inequality, planning practice, and K-12 public education. A leading scholar of cross-sector collaboration, public school closures, and school-centered community development, Dr Bierbaum investigates the institutional contexts, policy formation, and lived experiences of planning interventions. Her work builds understanding of how non-school systems support or hinder educational equity and racial justice, and how public schools play a role in urban planning and governance.

Alisha Butler

PhD Candidate
University of Maryland, College Park

Alisha Butler is a PhD Candidate in the College of Education at the University of Maryland, College Park. Her work draws on interdisciplinary perspectives to interrogate the overlapping ecologies of schools, neighborhoods, and cities that shape students' and families' experiences with schools and education. Her dissertation uses qualitative methods to investigate gentrification's effects on urban schools, with a focus on how middle-class families in gentrifying communities select secondary schools for their children, how administrators and educators respond to changing school demographics, and how gentrification shapes the politics of family engagement in urban schools.

Erin O'Keefe, MPP

PhD Candidate
University of Maryland, Baltimore County

Erin S. O'Keefe is the director of Loyola University Maryland's York Road Initiative and Center for Community Service and Justice. She is a doctoral candidate in urban policy at the School of Public Policy at University of Maryland, Baltimore County. As an applied researcher and student of community and economic development, O'Keefe seeks to understand cultural, structural and systemic barriers to implementing equitable community development initiatives. Ms. O'Keefe is particularly interested in what it takes to leverage the assets of community residents, public agencies, community-based organizations and anchor institutions to effectively collaborate and move toward collective impact.

AUTHOR BIOGRAPHIES

VERTICAL SCHOOLS AS COMMUNITY HUBS

Dr Tony Matthews

Senior Lecturer in Urban and Environmental Planning
School of Environment and Science, Griffith University

Dr Tony Matthews MRTPI is an award-winning Urban and Environmental Planner, with portfolios in academia, practice and the media. He is an active scholar, public writer, speaker and broadcaster. His research interests include responding to new forms of urban change, community-led planning and institutional, governance and policy change processes. Tony has won three Awards for Excellence from the Planning Institute of Australia and was named one of Australia's leading thinkers by The Conversation.

Associate Professor Clare Newton

Associate Professor in Learning Environments
The University of Melbourne

Clare, an architect and Doctor of Education, led two Australian Research Council Linkage Projects on learning space design. She is currently a Chief Investigator on two further Linkage Projects. Clare, a founding member of LEaRN, helped instigate the annual Talking Spaces symposia. Clare was Director of the Bachelor of Environments with over 2,000 students. She has been a Board Member of the Architects Registration Board of Victoria; elected Council member for the Australian Institute of Architects; elected President of the Association of Architectural Schools of Australasia; and Chair of the Validation Executive Committee for the Commonwealth Association of Architects.

Dr Mirko Guaralda

Lecturer
QUT School of Design

Mirko Guaralda (Ph.D., MHEd, DArch) is an academic at the Queensland University of Technology. His work focuses on people-place interaction, enquiring into the complex issues of urban density, place quality and community engagement. He was researcher at the United States Study Centre of Sydney in 2012; in 2017 he has been visiting professor at the Thammasat University of Bangkok, Thailand. Since 2018 he has been engaged also in research and teaching at the Jiangxi University of Science and Technology (China).

AUTHOR BIOGRAPHIES (cont.)

VERTICAL SCHOOLS AS COMMUNITY HUBS (cont.)

Associate Professor Severine Mayere

Associate Professor, Science and Engineering Faculty
QUT School of Built Environment

Associate Professor Severine Mayere is an urban planning scholar with more than a decade of academic experience in Australia and internationally. She currently teaches and researches in the field of urban and regional planning at Queensland University of Technology (QUT), Australia. Severine holds a Master of Science and a PhD in Urban and Regional Planning from Florida State University (United States), and a Master degree in Development and Town Planning from the University of Paris IV-Sorbonne (France). Prior to joining QUT, Severine worked as a research associate at the Technical University of Dresden (Germany). Her current research focuses on growth management, plan evaluation, and stakeholder engagement. Severine is a Fellow of the UK Higher Education Academy.

AUTHOR BIOGRAPHIES (cont.)

OUTSIDE THE CLASSROOM: SPATIAL CONSIDERATIONS TO FACILITATE COMMUNITY RELATIONSHIPS WITH SCHOOLS

Benjamin Coulston

Architect/Urban Designer

Ben is Sydney-based registered architect and urban designer within the practice Designinc. His work has focused on the realisation of masterplan and precinct visions but has included the delivery of a broad range of building typologies including education and housing. His research has focused on the intersection of policy and built outcome, from the spatial organisation of cities through to housing policy.

VERTICAL SCHOOLS AS COMMUNITY HUBS IN RESIDENTIAL NEIGHBOURHOODS

Dr Fatemeh Aminpour

Academic, Research Assistant
University of New South Wales

Fatemeh Aminpour PhD is a research assistant and sessional academic in the Faculty of Built Environment at the University of New South Wales. Her principal area of design and research interest is children's and young people's environments. She has extensive experience of research on school environments with particular interest in participatory methodologies in research with children. She holds a PhD from the University of New South Wales in Environment–Behaviour research and her Bachelor of Architecture and Master of Architecture from the University of Tehran, Iran.

AUTHOR BIOGRAPHIES (cont.)

CALVARY COMMUNITY HUB: CONCEPT DESIGNS IN RESPONSE TO THE NEEDS OF A THRIVING COMMUNITY HUB

Angela Branford

Principal
Calvary Lutheran Primary School

Angela is Principal at Calvary Lutheran Primary School and has served there for the past nine years. She has been working in Lutheran Education in Australia since 1995 and has held teaching and leadership positions at Lutheran Schools and Colleges in NT, WA and SA. She has a Bachelor of Education, Junior Primary, Graduate Diploma in Theology and a Master of Education, Administration. Angela has a strong commitment to developing learning communities that focus on student agency and for working closely with school communities supporting authentic lifelong connections.

Peter Moeck

Architect
Peter Moeck Architect

Peter is a sole practitioner Registered Architect in South Australia. He has been in practice for 35 years with a passionate interest in people and place, particularly the development of community and social infrastructure. His work portfolio includes public libraries, ecclesiastical and education sector commissions. Long term relationships have led to repeat commissions for a range of independent sector schools. Peter has been collaborating with Calvary Lutheran Primary School for eight years and this has led to the development of Concept Designs in response to the needs of a thriving 'Family Zone' Community Hub.

THE FAMILY ZONE: A SCHOOL-BASED, MULTI-PARTNERSHIP APPROACH TO CHILD AND FAMILY WELLBEING

Leigh Goodenough

Senior Manager Community Development (former)
Lutheran Community Care

Leigh Goodenough is a graduate of the University of South Australia and has worked for over 20 years in the fields of youth work and community development. In the past decade he has undertaken independent research into early childhood development and the engagement of vulnerable and isolated community cohorts in complex service delivery. This research has supported the development of practical and innovative approaches in various service contexts including refugee settlement, child protection, intergenerational poverty and domestic and family violence. Leigh lives in Nairne, South Australia with his wife and two sons.

AUTHOR BIOGRAPHIES (cont.)

OUR PLACE: OPENING THE SCHOOL GATES TO THE SCHOOL COMMUNITY

Dr Alexandra Fraser

Senior Research Advisor
Our Place – an initiative of the Colman Education Foundation

Alex joined Our Place in September 2018 as the Senior Research Advisor in the Research and Evaluation team. Alex's current role involves leading the qualitative data collection and analysis program, capturing evidence and stories from across the Our Place communities to demonstrate change and impact. During her time at Our Place, Alex was also the inaugural Partnership Manager at Our Place's Geelong site, overseeing its establishment. Alex holds a doctorate in Sociology and has a professional background in applied social, community and family research and evaluation, combined with program and project management experience within the local government and not-for-profit sectors.

Margaret Rutherford

Manager, Implementation Support
Our Place – an initiative of the Colman Education Foundation

Margaret joined the Our Place team in March 2019 as Implementation Support Manager. Margaret's current role involves supporting the people implementing the Our Place approach across 10 locations in Victoria and developing resources, learning processes and systems to ensure ongoing fidelity to the approach and support continuous improvement. Margaret holds a degree in education, however has spent the past 20 years working in senior community development and partnership brokerage roles with a focus on complex, multi stakeholder partnerships for positive change.

AUTHOR BIOGRAPHIES (cont.)

THE 21ST CENTURY LEARNING HUB: LESSONS FROM A JOINT USE SCHOOL AND COMMUNITY LIBRARY PROJECT IN REGIONAL AUSTRALIA

David Tordoff

Director
Hayball

A director at Hayball, David plays a key role in the practice's national education and commercial projects, working with state governments and private clients. With a deep understanding of site contexts, education design and communities, he has led multiple award-winning education and civic commissions that are recognised as exemplars in learning environment planning and community alignment. Nationally recognised for design excellence, David's work is a recipient of the prestigious Australian Institute of Architects Sulman Medal and numerous accolades from the Learning Environments Australasia (LEA). He is sitting member of North Sydney Design Excellence Panel and a juror for the 2020 LEA NSW Awards.

Dr Julia Atkin

Director
Learning by Design

Dr Julia Atkin is universally recognised for her rich understanding of learning and thinking and providing practical ways to support teachers and leaders in enhancing learning for all. Julia works extensively with individual schools as well as with education systems to help transform how they design the learning landscape - both pedagogically and physically. Her international work includes NZ, USA, UK, OECD and the World Bank. Julia believes she has avoided a 'use by date' by focusing on what is fundamental and universal in learning, leading and design.

ANTECEDENTS OF SCHOOLS AS COMMUNITY HUBS: THE LASTING INFLUENCE OF JOHN DEWEY'S PHILOSOPHY

Cynthia Hron

Designer & Studio Artist, BFA, MFA, MLA
Susquehanna Greenway Partnership and Penn State University

Originally from California, Cindi studied fine arts at Otis Art Institute in Los Angeles where she earned a BFA degree, and later at California College of Art in Oakland, where she earned an MFA. Her work seeks to encompass the social and cultural history of landscape and place, which has served as a catalyst for her many drawings, sculptures, and public projects. Her more recent venture into landscape architecture has led to an MLA degree from Penn State University.

AUTHOR BIOGRAPHIES (cont.)

TOWARDS INTEGRATED NETWORKS OF SCHOOL AND COMMUNITY INFRASTRUCTURE

Natalie Miles

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Natalie Miles is a PhD candidate in the Building Connections: Schools as Community Hubs ARC Linkage project at Learning Environments Applied Research Network (LEaRN) of the University of Melbourne. Natalie is researching 'Spatial Analysis of School and Community Interaction, identifying and recording who, where, when and how community members are using school facilities.

Natalie is also a registered architect in Victoria and has been practicing architecture as an Associate at Austin Maynard Architects with several award-winning projects under her belt since completing her Master of Architecture in 2013. This PhD project sees a return to her interest in schools and education after her master's thesis titled School/ City.

REAR VISION: LESSONS FROM COMMUNITY EDUCATION IN THE '80'S - MELBOURNE, AUSTRALIA AND FLINT, MICHIGAN, USA

Martin Brennan

Senior Research Fellow
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Martin Brennan was the Community Education Officer at the Princes Hill School Park Centre (1978 – 1985) and Community Education Director, Straits Area Community Education, St Ignace Area Schools, Michigan, USA (1983). Martin has a long political and professional record of seeking community empowerment and sustainable solutions for cities at the local, national and international level as a Melbourne City Councillor and a professional working in the local government sector. He is the former Regional Director, ICLEI Local Governments for Sustainability – Oceania and is currently a Senior Research Fellow, Melbourne Sustainable Society Institute at the University of Melbourne, Australia.

AUTHOR BIOGRAPHIES (cont.)

RESEARCHING POLICY SETTINGS FOR SCHOOLS AS COMMUNITY HUBS

Robert Polglase

PhD Candidate
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Joining the Building Connections team culminates Rob's long held dream to collaborate to build research based evidence for sharing knowledge to influence policy settings, connected to planning, design, delivery of learning and community sites to meet diverse community needs as flourishing centres.

Rob's research proposal is steeped in years of project work related to Building Connections' objectives for evaluating policy-planning-design-governance settings. This experience includes education, health, community sectors, commercial, multi-residential, public realm, transport infrastructure, urban renewal and land development programs. These projects have incorporated urban policy development, strategic planning, funding submissions, setting site planning and development vision, concept to final agreed design, contract procurement to delivery with advocacy for clients, stakeholders, communities, and all levels of Government.

Rob has extensively participated in industry forums and academic teaching throughout his career. Rob's recent teaching focus has included affordable, socially inclusive design for education, community health, housing density, connected neighbourhoods.

UNDERSTANDING THE DEVELOPMENT AND IMPLEMENTATION OF SCHOOLS AS COMMUNITY HUBS: A CASE STUDY APPROACH

Carolina Rivera-Yévenes

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Carolina Rivera Yevenes is a PhD candidate in the Building Connections: Schools as Community Hubs ARC Linkage project at Learning Environments Applied Research Network (LEaRN) of the University of Melbourne. Carolina's research focusses on how schools can be planned, designed, governed and managed to thrive as community hubs.

She holds a Master of Education from the University of Melbourne and a degree in education and philosophy. She has more than ten years' of experience as a teacher and is also working with schools as an academic consultant and formulating intervention programs. In 2012, she co-founded NGO Innovacien, a Chilean organisation working in the development of 21st-century skills, technology and innovation in schools.

AUTHOR BIOGRAPHIES (cont.)

MAKING IT WORK: MAKERSPACES, MAKER COMMUNITY AND HIGH SCHOOL PARTNERSHIPS

Linus Tan

PhD Candidate
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Linus Tan researches design and management strategies that enhance collaborations, to help architects work effectively as a team and with different stakeholders. His experience includes managing service operations in a digital fabrication laboratory and coordinating operations in an air force squadron. He is a Master of Architecture graduate from the University of Melbourne and is currently completing his PhD degree at Swinburne University of Technology.

Ravi Bessabava

Design Technical Officer
Swinburne University of Technology

Ravi is a design technical officer in Swinburne University of Technology's Protolab where he coaches architecture, industrial design and product design engineering students in the areas of design, fabrication and advanced manufacturing. His skill sets allow him to work fluidly across multiple disciplines at multiple scales, with a passion for sharing knowledge particularly around digital to physical workflows, geometry rationalisation, design thinking and manufacturing. He holds a Master of Architecture from the University of Melbourne.

Kristen Hebden

PhD Candidate
Swinburne University of Technology

Kristen is currently researching makerspaces in high schools, with a focus on the impact they have on students' self-concept. She has experience running a high school makerspace, as well as teaching STEM, maths and physics at a range of schools. Her previous careers as a science communicator and as an engineer have given her an appreciation of the need to increase diversity in STEM fields, and an indication to the barriers stopping it. Kristen is currently working on her PhD degree at Swinburne University of Technology.

Building Connections
Schools as Community Hubs

OUR RESEARCH

ARC LINKAGE PROJECT
2019 - 2022

Building Connections: Schools as Community Hubs is a three-year Australian Research Council (ARC) Linkage Project investigating how best to plan, design, govern and manage schools to operate successfully as 'more than a school', encouraging the development of resilient and connected communities.

Building Connections Project Team

Dr Benjamin Cleveland | Lead Investigator

Professor Janet Clinton | Chief Investigator

Associate Professor Clare Newton | Chief Investigator

Associate Professor Ian McShane | Chief Investigator

Dr Philippa Chandler | Research Fellow

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