Planning and Design for Play in the Built Environment

Advisory Note

NSW Play Australia Committee

Purpose

This Advisory Note outlines the importance of play and provides principles and guidance to encourage built environment professionals to integrate opportunities for play throughout the built environment. It is intended to complement the forthcoming NSW Design and Place State Environmental Planning Policy, other place-based design guidance, and to align with international convention commitments and goals endorsed by the Australian Government[1,2].

The draft Design and Place SEPP acknowledges that well-designed built environments contribute to our health and wellbeing and asks planners and designers to adopt a principles-based approach to guide the design of developments of all scales. These principles place emphasis on supporting and promoting community; including creating places that are inclusive, where we feel a sense of belonging, that are engaging, where we can thrive and where our wellbeing is supported.

The NSW Environmental Planning and Assessment Act 1979 aims to "provide increased opportunity for community participation in environmental planning and assessment"[3]. Approximately 25% per cent of our community is comprised of children and young people aged 18 and under. Implementation of the principles and guidance in this advisory note aims to ensure:

1. Our built environment is inclusive and spatially equitable.

2. Children and young people's needs are considered in the design of built environments, including the fulfillment of their right to rest, leisure, play, recreational activities, and cultural life (United Nations Convention on the Rights of the Child (UNCRC) General comment 17, article 31[4]).

3. Children and young people are consulted on policies and planning decisions related to play and recreation. This encompasses urban planning, the development of parks and other local facilities, and in the design for child friendly communities and environments. This upholds their right to be consulted and included in decisions that impact their lives and that their best interests are a primary consideration (UNCRC General comments 12, 14 and 20[5,6,7]).

4. Children and young people's play needs and priorities are equally recognised alongside other built environment considerations.

Why is play important?

Play is a quintessential activity enjoyed by the young in all species with complex social structures[8]. As such, play is recognised as a biological imperative of children and young people of all ages and capabilities[9]. A play/work dichotomy pervades the wider community, and a common misinterpretation is that work is substantive and play is merely a distraction or frivolity. For the purposes of this document, we characterise play as an intrinsic, creative, freely chosen, child-directed, participatory and an emergent process, where the process itself is most often prioritised over tangible outcomes[10,11,12].

The benefits of play pervade every aspect of a child's development: social, cultural, emotional, physical, and cognitive. Play is critical to healthy development including supporting increased intellectual achievement[13,14] and capabilities for academic success[15]; increased language and literacy development[16,17], promotion of social outcomes[15,18], development of self-knowledge and empathy, and increased ability to follow rules[19]. It is through play that children learn to navigate unexpected events without the consequences of real-world life experiences[12] and it supports children to develop the capacity to navigate the complexity of social structures. There is also evidence that children's play has an impact on social cohesion, with improved family wellbeing and increased social interactions provided through play in the community.[20,21,22,23]

Australian studies have reported that in 2017–18, 1 in 4 (25%) of children aged 5–17 were overweight (16.9%) or obese (8.1%)[24]. Active play offers a significant remedy that aligns with Commonwealth of Australia Department of Health (2019)[25] guidelines to improve activity levels for all ages. Diversity of physical experiences promotes physical literacy which establishes life-long positive predispositions towards physical activity. Physically risky play promotes children's self-directed risk management with health and behavioural benefits[26, 27]. Exposure to natural outdoor environments enhances children's mental wellbeing[28, 29] and research has identified symptoms of attention deficit disorder can be relieved and concentration enhanced by exposure to natural spaces[30]. Similarly, it has been identified that the amount of playground vegetation positively correlates with the restorative qualities of school grounds for well-being[31]. Multiple studies[32] emphasize early experiences and interaction with nature provide a significant means for cultivating interest in and concern for the environment. In an era of climate change and eco-anxiety, every opportunity for play in cool, natural outdoor settings should be prioritised, particularly in urbanised environments.

In summary, outdoor play facilitates higher levels of activity, and fosters physical and mental dispositions and skills critical for life-long positive health and well-being outcomes, and can contribute to children and young people's sense of belonging and connection to community.

Why engage children in the design and planning process?

When playing outdoors children are visible participants in their local community, but such community-based play has declined over recent decades.

Playspaces/playgrounds can be exclusionary, hard to reach and/or inconvenient for parents and carers. Providing environments where play can happen freely from the doorstep, to the street, in nature, parks, public spaces and between spaces makes an environment inclusive - from 'door to domain', a network of playable safe routes is our vision. It requires easily accessible spaces where children and young people have the freedom to play and spend time with peers. Easily accessible spaces increases the opportunities for natural surveillance or 'eyes on the street'[33] which further supports play.

Children and young people are competent and able to clearly express their needs, interests and concerns in the planning, and design of their local physical environments. It is an imperative that designers and planners recognise this role and seek to include and understand children's interactions within local contexts and draw on their local knowledge and experience. Seminal works by Moore (1986)[34] and Hart (1997)[35] have promoted children's active democratic participation in all spheres of public life (for example, recommended models of participation[36, 37]). They recognised children as empowered citizens with rights to enact decisions around issues that influence them and their communities. Children readily identify local environmental affordances for play, such as a climbing tree, hiding spaces, safe and unsafe public spaces and are the 'play experts' best placed to provide advice on their needs and interests in the urban environment, range of independent mobility and any impinging factors.

Principles – the CASE for play

There are 4 key principles for consideration when planning and designing the built environment:

C: Context and vision
Design which is developed through a process of authentic engagement with children and young people, leverages their wealth of knowledge, respects their specific needs and interests and recognises local community priorities.

Questions for reflection
Have the local and targeted demographic of children

and young people been consulted. Do you under-stand their social, physical, emotional and cultural needs and their aspirations for the place? How do they want to play and what does that place look like for them? Will they feel safe?

A: Accessible and inclusive

Children and young people are provided with a range of accessible, multi-purpose play opportunities which invite repeated, shared participation, for all ages, backgrounds and capabilities. Carers are supported by thoughtful well-positioned accessible facilities, such as seating, shade and parking.

Questions for reflection

Does your design reflect children's and young people's needs and aspirations? Are there multiple opportunities to play and hang out with peers? Does the play offer provide something for everyone? Are there places for adults to safely supervise from a distance? Is it spatially just and engaging?

S: Sustainable, social and well-maintained

Children and young people are provided with environments that support play, prioritising cooler, natural spaces within built environments offering shade, playability, health and well-being benefits, a sense of belonging and where they feel welcome.

Questions for reflection

Will the environment be well-maintained with council agreements for long term care of the place? Is there provision and space for physical activity and

quiet spaces for relaxation? Is there shade? Is it a space where children, young people and carers will want to linger longer and revisit?

E: Empowering

The design invites children and young people to independently explore, discover and adapt the environment creating meaningful play affordances, promoting social interaction and independent mobility?

Questions for reflection

Can children play close to home and is young people's independent mobility supported e.g. can they cycle or skate safely? Is it easy for them to engage with other members of the community? Is there capacity to engage with and manipulate the environment with a range of affordances offered, such as flexible seating, space to dance, play music and to socialise with friends.

Conclusion

By creating environments that support play, we can increase children and young people's sense of wellbeing, belonging, engagement with community and build social cohesion. Design and planning the built environment incorporating the CASE for play supports and enhances the resilience and wellbeing of communities now and in the future.

CASE FOR PLAY

C
Context & vision

A
Accessible & inclusive

S
Sustainable, social & well-maintained

E
Empowering

Understand context and vision for children and young people's play through authentic engagement.

Design reflects children and young people's needs and aspirations, providing spatially equitable, engaging places.

Safe environment where health and well-being is supported and children and young people feel welcome

Thriving community, where children and young people have freedom to play

References

1 United Nations (2017) *New Urban Agenda.* https://uploads.habitat3.org/hb3/NUA-English.pdf

2 United Nations, Department of Economic and Social Affairs (2015) *The 2030 Agenda for the Sustainable Development.* https://sdgs.un.org/goals

3 Environmental Planning and Assessment Act 1979 No 203, Part 1.3, (j). https://legislation.nsw.gov.au/view/whole/html/inforce/current/act-1979-203

4 United Nations Committee on the Rights of the Child (2013). *General comment No. 17 - On the right of the child to rest, leisure, play, recreational activities, cultural life and the arts (art. 31).* https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/TBSearch.aspx?TreatyID=5&DocTypeID=11

5 United Nations Committee on the Rights of the Child (2009). *General comment No. 12 - The right of the child to be heard.* https://www2.ohchr.org/english/bodies/crc/docs/advanceversions/crc-c-gc-12.pdf

6 UNCRC (2013) United Nations Committee on the Rights of the Child, *General comment No. 14 - On the right of the child to have his or her best interests taken as a primary consideration (art. 3, para. 1).* https://www2.ohchr.org/English/bodies/crc/docs/GC/CRC_C_GC_14_ENG.pdf

7 United Nations Committee on the Rights of the Child (2016). *General comment No. 20 – on the implementation of the rights of the child during adolescence.* https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/TBSearch.aspx?TreatyID=5&DocTypeID=11

8 Bekoff, M., & Byers, J. (Eds.). (1998). *Animal play: Evolutionary, comparative and ecological perspectives.* Cambridge University Press. https://doi:10.1017/CBO9780511608575

9 Yogman, M., Garner, A. Hutchinson, J., Hirsh-Pasek, K. & Michnick Golinkoff, R. (2018). The power of play: A paediatric role in enhancing development in young children. *Pediatrics*, 142(3), 1–17. https://doi.org/10.1542/peds.2018-2058

10 Eberle, S. G. (2014). The elements of play: Toward a philosophy and a definition of play. *American Journal of Play*, 6 (2), 214-233. https://www.journalofplay.org/issues/6/2

11 Pyle, A., & Danniels, E. (2017). A continuum of play-based learning: The role of the teacher in play-based pedagogy and the fear of hijacking play. *Early Education and Development*, 28 (3), 274-289. https://doi.org/10.1080/10409289.2016.1220771

12 Hewes, J. (2014). Seeking balance in motion: The role of spontaneous free play in promoting social and emotional health in early childhood care and education. *Children*, 1(3), 280-301. https://doi.org/10.3390/children1030280

13 Fisher, K., Hirsk-Pasek, K., Golinkoff, R.M., Singer, D.G., & Berk, L. (2011). Playing around in school: Implications for learning and educational policy. In A.D. Pellegrini (Ed.), *Oxford Handbook of the development of play* (pp.341-360). Oxford University Press.

14 Whitebread, D. (2012). *The importance of play: A report on the value of children's play with a series of policy recommendations.* https://www.csap.cam.ac.uk/media/uploads/files/1/david-whitebread---importance-of-play-report.pdf

15 Weisberg, D. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2013). Guided play: Where curricular goals meet playful pedagogy. *Mind, Brain and Education*, 7(2), 104–112. https://doi.org/10.1080/09575146.2010.529425

16 Lillard, A. S., Lerner, M. D., Hopkins, E. J., Dore, R. A., Smith, E. D., & Palmquist, C. M. (2013). The impact of pretend play on children's development: A review of the evidence. *Psychological Bulletin*, 139(1), 1-34. https://doi.org/10.1037/a0029321

17 Stagnitti, K. et al. (2016). An investigation into the effect of play-based instruction on the development of play skills and oral language. *Journal of Early Childhood Research*, 14(4), 389-406. https://doi.org/10.1177/1476718X15579741

18 Nugent, M. (2017). *Teachers' experiences with integrating play-based learning into standards-driven curriculum: A phenomenological study.* A Dissertation Presented to the Faculty of Education Doctoral Program, Liberty University.

19 Martlew, J., Stephen, C., & Ellis, J. (2011). Play in the primary school classroom? The experience of teachers supporting children's learning through a new pedagogy. *Early Years: An International Research Journal*, 31(1), 71–83. https://doi.org/10.1080/09575146.2010.529425

20 Gill, T. (2014). The benefits of children's engagement with nature: A systematic literature review. *Children, Youth and Environments*, 24(2), 10–34. https://doi.org/10.7721/chilyoutenvi.24.2.0010

21 Global Designing Cities Initiative (2020). *Designing Streets for Kids.* https://globaldesigningcities.org/publication/designing-streets-for-kids.

22 LaTrobe University & Centre for Sport and Social Impact. *How Play Streets supports the physical literacy in children: A research review.* https://www.researchgate.net/publication/342014995_How_Play_Streets_supports_the_development_of_physical_literacy_in_children_A_research_review.

23 Umstattd Meyer, M.R., Bridges, C.N., Schmid, T.L., Heck, A.A., & Pollack, K.M. (2019). Systematic review of how Play Streets impact opportunities for active play, physical activity, neighborhoods, and communities. *BMC Public Health* 19, 335. https://doi.org/10.1186/s12889-019-6609-4

24 Australian Institute of Health and Welfare (AIHW) (2020). *Australia's Health.* Australian Government. https://www.aihw.gov.au/reports/australias-health/overweight-and-obesity

25 Australian Government Department of Health (2019). *Physical activity and exercise guidelines for all Australians.* https://www.health.gov.au/health-topics/physical-activity-and-exercise/physical-activity-and-exercise-guidelines-for-all-australians/for-children-and-young-people-5-to-17-years

26 Brussoni, M., Gibbons, R., Gray, C., Ishikawa, T., Sandseter, E. B., Bienenstock, A.,Chabot, G., Fuselli, P., Herrington, S., Janssen, I., Pickett, W., Power, M., Stanger, N., Sampson, M. & Tremblay, M. S. (2015). What is the relationship between risky outdoor play and health in children? A systematic review. *International Journal of Environmental Research and Public Health*, 12(6), 6423–6454. https://doi.org/10.3390/ijerph120606423

27 Sandseter E. & Kleppe, R. (2019). Outdoor risky play. In M. Brussoni (Ed.) *Encyclopedia on Early Childhood Development.* http://www.child-encyclopedia.com/outdoor-play/according-experts/outdoor-risky-play.

28 McCormick, R. (2017). Does access to green space impact the mental well-being of children: A systematic review. *Journal of Pediatric Nursing*, 37, 3-7. https://doi.org/ 10.1016/j.pedn.2017.08.027

29 Townsend, M., & Weerasuriya, R. (2010). *Beyond blue to green: The benefits of contact with nature for mental health and well-being.* Beyond Blue Limited.

30 Faber-Taylor, A., & Kuo, F. E. (2008). Children with attention deficits concentrate better after walk in park. *Journal of Attention Disorders*, 7(5), 402–409. https://doi.org/ 10.1177/1087054708323000

31 Bagot, K. et al. (2015). Perceived restorativeness of children's school playground environments: Nature, playground features and play period experiences. *Journal of Environmental Psychology.* https://doi.org/10.1016/j.jenvp.2014.11.005.

32 Chawla, L. & Derr, V. (2012). The development of conservation behaviours in childhood and youth. In S. D. Clayton (Ed.), *The Oxford handbook of environmental and conservation psychology* (pp. 527-555). Oxford University Press.

33 Jacobs, J. (1992). *The Death and Life of Great American Cities*, 2nd ed. Vintage Books.

34 Moore, R. C. (1986). *Childhood's domain.* Croom Helm.

35 Hart, R. (1997). *Children's participation: The theory and practice of involving young citizens in community development and environmental care.* Earthscan.

36 Organising Engagement (n.d.). *Spectrum of Public Participation.* https://organizingengagement.org/models/spectrum-of-public-participation

37 Organising Engagement (n.d.). *Ladder of Children's Participation.* https://organizingengagement.org/models/ladder-of-childrens-participation/

Other useful resources

Cities 4 Children. (2021) *Knowledge Hub.* https://cities4children.org/knowledge-hub/

Danenbourg, R., Doumpa, V. & Karssenberg, H. (Ed.)(2018). *City at Eye Level for Kids.* https://thecityateyelevel.com/app/uploads/2019/06/eBook_CAEL_Kids_Book_Design_Kidsgecomprimeerd.pdf

Driskell, D. (2002) Creating Better Cities with Children and Youth – A Manual for Participation. UNESCO and Earthscan Publications.

Gill, T. (2021). *Urban playground – How child friendly planning and design can save cities.* Routledge.

Lester, S., Russell, W. (2014) Turning the World Upside Down: Playing as the Deliberate Creation of Uncertainty. *Children*, 2014, 1, 241-260. https://doi.org/10.3390/children1020241

NSW Government. (2019) *Everyone Can Play.* https://www.everyonecanplay.nsw.gov.au

Shackell, A., Butler, N., Doyle, P., & Ball, D. (2008). *Design for play. A guide to creating successful play spaces.* https://www.researchgate.net/publication/228823803_Design_for_play_a_guide_to_creating_successful_play_spaces/link/0046352f0d1868b02d000000/download

ZCD Architects and Grosvenor Britain & Ireland with the TCPA and Sport England (2020) *Voice Opportunity Power – A toolkit to involve young people in the making and managing of their neighbourhoods.* https://voiceopportunitypower.com/

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