STANDING COMMITTEE ON EDUCATION AND COMMUNITY INCLUSION Mr Michael Pettersson MLA (Chair), Mr Jonathan Davis MLA (Deputy Chair), Ms Nicole Lawder MLA

Submission Cover Sheet

Inquiry into the Future of School Infrastructure in the ACT

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TO: LAcommitteeECI@parliament.act.gov.au

RE: Inquiry into the future of ACT school infrastructure
Attn: Michael Pettersson MLA (Chair), Johnathan Davis MLA (Deputy Chair), Nicole Lawder MLA

I am writing regarding the inquiry listed above with particular reference to the following:

c) Consideration of the external environment

I am a landscape architect and PhD candidate at the Health Research Institute (HRI) at the University of Canberra. The focus of my doctoral research is on how outdoor spaces can better meet the needs of Australian teenagers through the design of secondary schoolyards. As part of this, I have undertaken surveys, focus group discussions and phone interviews with teenagers, designers and school leaders from within Canberra and across Australia. Most agree on one thing: the schoolyard is not meeting the needs of older youth.

High school students tell me they are spaces to be endured rather than enjoyed. Designers describe how low budgets and low maintenance create places of low value. Some principals tell me teenagers don't need playgrounds.

Growing evidence shows that spending time outdoors is good for us. It reduces stress, improves focus, promotes creativity and keeps us active. In high school, recess and lunch provide students with a daily dose of time outside. Given rising rates of anxiety and depression among adolescents, the schoolyard can be a place to provide comfort and relief from the grind of classwork and social stresses. But there is little research documenting whether current standards of design really empower teenagers to reap the well-being benefits of time outside.

Over the last century, secondary school buildings have evolved while their schoolyards have not. Building standards and guidelines of secondary school facilities are most often framed around maintenance, operational costs and minimising risk. Education policy frameworks for assessing and supporting the well-being needs of students are defined separately to the requirements of school building standards. Little research-based evidence exists around the design impacts of schoolyards on student health and behaviour. There is a need to bridge and build knowledge between these silos of health and design if students are to harness the well-being benefits of time outside during the school day.

To address this issue, I have been investigating how schoolyard design affects teenagers' perceptions of health and well-being. My studies have focused on how these spaces are perceived by the principals who manage them, the practitioners who design them and – most importantly – the students who use them. This has been undertaken through three projects. The first was an ACT student design competition in 2021 called *The Schoolyard I'd Like*, where secondary students offered their visions of the ideal schoolyard through posters and essays. The second was a case study of a Canberra school that examined how sex and age affect student schoolyard design preferences and perceived well-being impacts. The final study looks at how design practitioners and secondary school principals from across Australia perceive the schoolyard in terms of its opportunities, constraints and future priorities. These are in process of being summarised in research papers as part of the PhD; I have attached the abstract for each. I would be happy to discuss these findings further if it would be of interest to the Inquiry.

One consistent finding from my research is the need for student agency within schoolyard spaces. User consultation is a critical process within any open space design process. Of the nearly forty secondary school principals and design practitioners I have interviewed, nearly all agreed that the voice of students needed to be included in the design of schoolyard spaces. Yet less than twenty-five per cent of interviewed designers regularly consulted with students during the design process. This is a missed opportunity to provide students with the chance to affect positive change and gain a sense of ownership and value at a time when they can often feel like their voices aren't heard.

I believe that a pilot internship program that engages secondary students in the process of green space transformation at schools would help empower students while also creating spaces that truly reflect their needs. The Apprenticeship Programme in City Design at the London School of Economics provides an interesting case study in providing older youth with the opportunity to be involved in the design and creation of open spaces. Climate change requires us to re-think approaches to the way in which we design and engage with our built environment. I can think of no better way to demonstrate the opportunity of what 'could be' than through the living laboratory of schoolyard spaces.

Thank you for this opportunity to provide a comment in your inquiry.

Yours sincerely,



Research Paper Abstracts

"Enjoyed by Jack but Endured by Jill: An Exploratory Case Study Examining Differences in Adolescent Design Preferences and Perceived Impacts of a Secondary Schoolyard". G Leigh, M Muminovic, R Davey. International Journal of Environmental Research and Public Health 20, no. 5 (2023): 4221

The school grounds provide students opportunities for respite, relaxation and relief from daily stresses during breaks in the school day. However, it is unclear whether secondary schoolyard designs adequately support the diverse and evolving needs of adolescents, particularly at a time when they are experiencing rapid emotional and physical developmental change. To investigate this, quantitative methods were used to explore differences in perceptions of schoolyard attractiveness and restorative quality based on student gender and year level. A school-wide survey was administered to approximately 284 students in years 7 to 10 at a secondary school in Canberra, Australia. Results indicate significant declines in student perceptions of schoolyard attractiveness and restorative quality. Higher ratings of schoolyard likeability, accessibility, personal connection and restorative quality of 'being away' were associated with male students across all year levels. Further work is needed to explore how schoolyard environments can better support the design preferences and well-being needs of older and female students. Such information would help planners, designers and land managers develop schoolyard designs that are more equitable in their benefits to secondary school students of different genders and year levels.

"The Schoolyard I'd Like: An Ideas Competition for School Children in Years 7-12". G Leigh, R Davey & M Muminovic. Schoolyard design provides an ideal opportunity to create spaces that provide respite for students during the school day. However, the outdoor preferences of adolescents are not fully understood. This study uses qualitative methods to analyse the schoolyard designs of thirty-eight students in Years 7-12. The aim is to identify and define indicators of schoolyard design quality and impact. Findings reveal that students desire schoolyards that provide relief from daily academic and social stresses. Of particular focus are spaces designed for peer engagement and self-renewal. Student measures of schoolyard quality are framed through attributes of beauty, agency, adaptability, and social connection. Schoolyard design is often driven by industry standards of minimising risk and cost. Our analysis suggests that these spaces should be more responsive to user aesthetic preferences, social values, and environmental concerns to promote student restoration. Such information would benefit designers, managers and users of schoolyard spaces to ensure designs address student restorative needs during the school day.

"Design Antidotes for Sick Schoolyards". G Leigh, M Muminovic & R Davey.

Restorative environments are places that promote rest and recovery from stress and fatigue. The aim of this study was 1) to identify the preferred design qualities of restorative schoolyard spaces within secondary environments as perceived by schoolyard 'experts' and 2) to determine if consensus exists in their perceived relevance. Twenty-four schoolyard design practitioners and eighteen secondary school principals participated in this Delphi study, which implemented three rounds of data collection. Round one collected responses to a semi-structured phone interview addressing schoolyard function, quality and impact. Responses were developed into statements and recirculated in Round Two as an online survey, with subjects asked to either rate or rank their level of agreement. A revised online survey was circulated in round three consisting of statements that did not reach consensus in the previous round, along with new statements derived from subject responses. Findings identified four categories of restorative design attributes (agency, attraction, engagement and passage) and thirteen well-being measures of restorative design impact. Practitioners and principals similarly ranked schoolyard attributes of agency and passage but were least alike in rankings of attraction. Of the 14 well-being measures assessing restorative design impact, 10 reached the consensus threshold (at or over 75 percent). Our findings indicate the potential to integrate restorative design frameworks and well-being performance metrics into schoolyard design standards. Such information would help utilise the school grounds as a tool for supporting student well-being in secondary school facilities.