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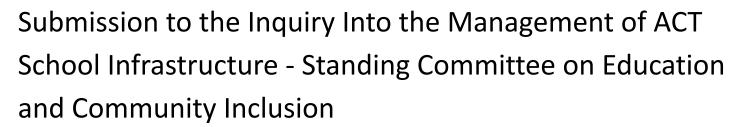
Submission Cover Sheet

Inquiry into the management of ACT school infrastructure

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Miles Greenwark May 7th, 2021



I would like to start by acknowledging that as a student in these very schools, the opportunity to directly submit content to this inquiry is appreciated.

I currently attend Hawker College as a year 11 student, and attended Latham Primary school from 2011 to 2015, Macgregor Primary School in 2016, and Kingsford Smith School from 2017 to 2020. I have been involved in a few projects aimed to aid public high schools - and their students, particularly from 2019 - 2020 where I worked as part of the *Kingsford Smith Imaging Team* to explore and implement strategies to improve Kingsford Smith School's public reputation and external communication, which led to us receiving the 2021 Young Canberra Citizen of the Year group award.

Throughout my time in Canberra's public schools, I have identified a few key issues that if fixed, would benefit students and wider school communities immensely.

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Hazardous Materials

- 1. Issues with hazardous materials in schools
 - a. With the recent news that many schools in the ACT contained hazardous materials, I and most of my friends simply assumed that any work to remove the materials would be carried out during the school holidays - when staff and students are not in the building. Instead, in the middle of the second week of term two, this (see pictured) appeared in a stairway in the college, completely out in the open.
 - b. Since we have been working in buildings with potentially toxic materials in them, we would rather know sooner than later. The fact that we found out about this issue through the media rather than communications sent home to parents is also concerning, and just caused more confusion about whether the affected schools were safe.



Digital Infrastructure

- 2. Security policies enforced on directorate administered PCs (not Chromebooks), are difficult to use for developing essential skills outlined in the Australian Education Curriculum (https://www.australiancurriculum.edu.au/f-10-curriculum/technologies/digital-technologies/?year=1 2986&year=12987), particularly from years 7 10, where digital skills are supposed to grow to incorporate basic artificial intelligence systems, or creating practical solutions like building fully-functioning websites. Both of these are near impossible to do on any directorate or school administered hardware, the Chromebooks do not even come close to being able to do either of these things simply because of the locked-down nature of Chrome OS, but school PCs usually running Windows 10 easily have the resources necessary to facilitate such learning, they are just locked behind out-dated software and security policies.
 - a. In some cases, the Education Directorate did not maintain licences for products installed on certain computers throughout various high schools, such as the *Adobe Creative Cloud Suite*, and certain parts of the *Unity* game engine.
 Software updates are also incredibly difficult for individual schools to obtain, often having to wait months, or even *years* in the case of *Unity* at Kingsford Smith School. These conditions are not viable for students, as there are no competent alternatives available on Chromebooks yet, directorate administered hardware is usually the only way to access the correct tools with classes like digital media, photography, robotics, digital technologies (networking and security, programming), and art.
 - Security policies active on the PCs are too restrictive for a flexible learning environment.
 Although the goals of said policies are well meaning, they often get in the way of both teachers

and students trying to carry out valid teaching and learning. Programming is probably the best example: for the ACT, and Australia as a whole, programming and general computer competency is already one of the most important skills for modern students to be taught, so when applications like a basic *Integrated Development Environment* are not installed, and programming languages are usually completely absent, with the rare exception of *Python*, the security of an important industry is being pulled out from underneath the ACT, since students cannot go out on their own and install or even request these applications themselves without going through complicated bureaucratic processes.

- c. There is no clear official appeal process for students to request sites to be unblocked from the ever-persistent *ContentKeeper* security applications installed on Chromebooks, which since January 13th 2021 have been restricting sites on students' own home networks. Valid education material is often picked up and flagged by the software for one reason or another, my favourite example being the New Zealand electoral commission's website, which is blocked for being "Non-Managed" (https://elections.nz).
- 3. Wireless access points throughout schools constantly drop out during peak hours, which causes inconveniences to students and teachers who are operating in an environment where applications like *Google Classroom* are essential. The *ONE* network used in colleges is particularly bad when it comes to this issue, with network interruptions occurring every 15 20 minutes.

Accessibility & Design

- 4. Areas are designed inconsistently across schools in the ACT, and usually inconsistently within schools themselves. Some schools, particularly in older ones like Macgregor Primary, have areas which are hard to access for people who are wheelchair bound or have difficulties with balance or walking in general, compared to newer schools like Kingsford Smith School where all upstairs areas are wheelchair accessible through elevators. These sorts of inconsistencies make it unfair for students and staff at certain schools compared to others.
- 5. Classrooms within schools themselves can vary significantly throughout campuses depending on which parts of the school get upgraded or added throughout the years. Macgregor Primary is yet again a good example, it received upgrades to its year 5 and year 6 buildings, which were designed in a modern and accessible manner, compared to older areas in the school which still had issues for some people with disabilities to efficiently access. Again, because of these inconsistencies, one group of people are at a disadvantage compared to others in other schools or even other parts of the same school.
- 6. Chairs in classrooms can be a source of discomfort for many students, most schools make consistent use of a particular brand of plastic chair which are just plainly uncomfortable. Ergonomically, the chairs encourage slouching and poor posture simply based on how uncomfortable they become after a certain amount of time.

Toilets & Bubblers

7. The quality of toilets in Canberra's public schools is just terrible to put it bluntly. I have never actually been in one where all the cubicles have had functioning locks, and the common lack of air freshener is

always a reminder of how poorly they are managed. Usually the locks are damaged from vandalism, but I find it hard to reconcile with the fact that for the last 20 years, the ACT has failed to change the type of lock to one that can withstand the strength of students in years K to 6 for more than a month. The locks can also be opened from the outside by people with long enough fingernails or a similarly shaped object. Not only is it a massive general privacy issue, but people with certain anxieties will simply refuse to use them given their state, and will just wait until they can get home or get to the nearest public shops.

- 8. Bubblers have also endured similar unfortunate fates in their time in our public schools, many of their pipes have become exposed, and their drains are usually clogged with chewing gum or other ambiguous gelatinous substances. Some schools have bubblers with no shade above them, leaving them exposed to direct sunlight, rain, and other foreign objects from the sky, which is what I can only assume has led to their distinctive disgusting taste. A common association used among students is that the bubblers taste like "oysters", which brings into question their health impacts.
- 9. The dedicated drink bottle water dispensers placed around ACT schools are the only source that delivers clean and drinkable water that does not induce feelings of sickness, however there are usually too few around school campuses, sometimes one per school, requiring inconvenient journeys across school grounds to fill up a drink bottle.

Physical Education Equipment

- 10. Equipment used in Physical Education classes in primary and high schools is often in a dilapidated state:
 - a. Balls used in games commonly have foam coming out of them, or just holes in general.
 - b. Nets, goalposts, and other similar equipment usually have holes or tears, affecting the ability of classes to properly participate in an activity.
 - c. Fitness equipment is lacking:
 - i. there are usually only two or three dumbbells not sets of weights per school with weights ranging up to 5kg.
 - ii. Sit up mats are too thin which can make the activities difficult for some people on hard surfaces.
 - iii. Basketballs and the like are almost always under-inflated, sometimes deflated, and I have never seen a functioning pump at any school, except one in Kingsford Smith School which promptly broke in 2019.
 - d. Overhead lights in school gyms are chosen poorly, it is only a matter of time before one student throws a basketball or kicks a football at the right angle and a light comes crashing down, potentially causing injury to themselves or others.

Dedicated Music Equipment

- 11. School music programs often rely on students bringing in their own instruments from home, already setting up a disadvantage for students who may come from a household who cannot obtain such items. For some schools, the alternative to this is low-quality instruments with old parts, for example:
 - a. Cheap guitars which go out of tune easily with strings that are barely ever changed.

- b. Amps with broken knobs or cable jacks.
- c. Snapped drumsticks.
- d. Microphones which do not function and/or deliver poor quality audio.

Other Miscellaneous Issues

- 12. Locks on classroom doors around schools are often hard to open with their key since some heavier doors require the opener to pull on the key while it is sitting on the lock.
- 13. Areas beneath stairwells often have mouldy areas where water leaks, particularly underneath fire extinguishers.
- 14. Concrete courtyards in older schools have become broken and cracked in many places due to tree roots or just general damage, posing a safety issue.
- 15. Wooden frames built around trees have become broken leaving splinters exposed.

Recommendations

I recommend that:

- 1. Times for work to be done on removing or investigating hazardous substances and materials should be allocated during school holidays or other appropriate times when schools are not actively being used by staff or students.
- 2. Schools are consistently evaluated for the presence of aforementioned substances and materials so that students, staff, and parents and other guardians can rest assured that people are not at risk in Canberra's schools.
- 3. If work on these materials must be done while a school is actively being used, that the work areas be properly sealed off from access by students and staff, and appropriate measures be taken to ensure people with disabilities can still effectively access any places throughout the campus that may be inconvenienced by said work.
- 4. Software on directorate managed computer hardware is properly updated to keep up with class demand, and that software licences are paid for correctly to avoid Canberra's schools falling behind other jurisdictions in terms of access to different applications.
- 5. Digital security policies are evaluated and changed on ACT Education Directorate managed PCs to allow for access to a broader range of tools for students to use, particularly those in digital technologies classes so they are well equipped for the fastest growing employment areas in Australia, and the world.
- 6. An official, easy-to-follow appeal process is implemented for students to apply for Territory-wide access to blocked sites that contain valid and useful educational information which is otherwise inaccessible within schools.
- 7. Wireless access points in schools are checked for defects or be upgraded to account for larger amounts of traffic and network congestion, to avoid network interruptions or dropouts.
- 8. The *ONE* wireless network used in colleges is checked to ensure that it lives up to the standards required by college students and staff.
- 9. New areas in schools, and new schools themselves, are built and checked against a set of standards which define two main things that are currently commonly lacking in Canberra's classrooms:

- a. Accessibility students and staff with disabilities should be able to easily reach the same place as others without large time detriments.
- b. Aesthetics classrooms should not look or be shaped drastically differently between schools in terms of their design, ensuring that the highest amount of students and staff in the ACT can feel comfortable in their classrooms.
- 10. The quality of chairs from foundation to year 12 are assessed to ensure that better alternatives to the current common chairs used in the ACT's public schools are not being ignored.
- 11. Better locks are used in school toilets' cubicles, ones that:
 - a. Will not easily break due to physical force, especially from students in primary years, who should not be able to break any lock in the first place.
 - b. Cannot be opened easily from the outside with a small, thin object.
- 12. Air freshener is used and maintained in toilets to prevent *breathing difficulty*.
- 13. School bubblers are regularly cleaned to ensure their hygiene and correct functionality.
- 14. Bubblers' water quality is checked regularly to protect the health of students and staff.
- 15. Shade must be present over all bubblers to prevent rainwater and sunlight from damaging the bubblers or potentially affecting their water quality.
- 16. Drink bottle water dispensers are placed more frequently throughout schools.
- 17. A system is set up to collect students' feedback on the state of infrastructure in their schools, and to act on it accordingly. This could be merged into the already existing School Satisfaction Survey, or be distributed separately.
- 18. Better equipment is purchased for physical education classes, ensuring that the quality and quantity of equipment is sufficient.
- 19. Functional pumps for basketballs or footballs be present in all schools.
- 20. Overhead hanging lights in school gyms (or other areas where objects are commonly moving around near hanging lights at high speeds) are replaced with static ceiling lights, and wall lights behind mesh or another protective material if the light level is not sufficient.
- 21. Schools are able to acquire higher quality musical instruments and other equipment for the arts, rather than putting less fortunate students at a disadvantage by requiring them to bring in equipment from home.
- 22. Mould is kept under control in carpets, walls, and areas which are dark and moist fire extinguishers under stairways seem to be a common area.
- 23. Broken concrete courtyards are replaced with new concrete or other appropriate materials.
- 24. Old wooden frames or equipment is replaced with new wood or another material to avoid common splinters.