

Balmain Public School – “Cooling the School” Initiative brief

In 2024, the P&C set out to achieve three primary goals.

1. To tackle the severe shortages of computers at Balmain Public School;

- ✓ The P&C sourced donations of 100 high quality computers worth ~\$140K
- ✓ Hugely successful colour run allowed school to purchase an additional 48 computers and 8 charging stations;

2. To deliver best-in-class 2024 Art Show

- ✓ Incredible support from the school, community and local businesses;
- ✓ Event raised ~\$45,000;
- ✓ Recognition of event and P&C by Kobi Shetty in parliament

3. Address School temperatures

- ✓ Blinds on North-facing aspect of main building complete
- ✓ Won community building grant for \$14,000 to install blinds on south facing side of main building
- ✓ All classrooms will have blinds by December

At the start of 2024, 45 of the 60 windows in the main building were missing operable blinds which are in progress to be replaced. This will go some way to alleviate the heat challenges, but we recognise there is still a significant temperature problem we need to address.

The 2024 P&C Executive has voted in favour of addressing temperatures as our highest priority going forward, recognising this is a multi-year project.

A special P&C meeting to address school temperatures will be held on 6 November at 7pm online or at the Royal Oak where we will outline the problems we will need to solve and our action plan. The community (including non P&C members) are welcome to attend this special forum and will be given the opportunity to provide feedback and ask questions.

What is the problem?

Due to the height and the structure of the building (high ceilings with exposed windows) the classrooms heat up above outside temperatures on warm days. For safety reasons, most windows may only be opened 12.5cm so ventilation in the classrooms is also limited and many of the windows do not open (school is presently addressing).

Year 5 students are presently measuring inside temperatures, but we anecdotally believe that the top level may be in excess of 3 degrees higher than outside air temperature.

Why can't the Department of Education fund air conditioning at Balmain Public School?

The Department of Education will fund and install air conditioning at certain public schools provided several conditions are met (“Cooler Schools”). Schools are eligible if the mean maximum January temperature in the locale exceeds 30 degrees over the past 20 years.

Balmain Public School does not qualify for this funding as its mean maximum January temperature over the last 20 years was approximately 29 degrees.

What are the impediments to implementing air conditioning now?

Many of the Balmain Public School buildings are heritage listed meaning that our only option for installation are ducted systems. Window air conditioners are not allowed to be placed on the external face of the building and standalone systems are inadequate due to the height of the ceilings.

Ducted systems are extremely expensive costing approximately \$15,000 per classroom. On top of this, the existing switchboard may need an upgrade to cope with the additional energy load.

Preliminary investigations indicate that the current 3-phase switchboard system maybe sufficient, however electrical load testing is necessary to confirm whether the current system is adequate to cope with the additional load. This needs to be completed by the Department of Education, a request has been raised to get this completed (July 2023).

P&C is proposing to undertake load-testing and the costs will be voted on during the November 6 meeting (Expected to be ~\$5000).

Can we just get solar and this will solve the switchboard issues`

Solar does reduce the energy consumption of air conditioning.

There is already solar on the main building of Balmain Public School. In 2021, the P&C was successful in obtaining a “Solar my school” grant. Due to the heritage listed nature of the building getting solar is highly unlikely that additional solar would be approved.

Per above, we understand that a switchboard upgrade is not likely to be necessary (to be confirmed) so we don’t expect energy load to be a major impediment.

What is the P&C’s “Cooling Initiative” action plan?

As a first step, we will need to understand the costs involved in installing in air conditioning. Electrical load testing is the first step to understanding the all-in-costs.

- **6 November** – Special P&C meeting of cooling the school & ventilation, community welcome
 - School has requested load testing via DoE, P&C will vote to approve expected costs,
- **November** – P&C will apply for the Community Building Partnership Grant to replace water coolers with chilled water coolers (exp cost \$17,000)
- **November** – P&C looking into ACNC not for profit status to accept tax deductible donations on infrastructure projects
- **1 December** – Blinds on south side of main building will be installed
- **4 December** – School to provide an update on ventilation and progress of load testing with Department of Education & windows; P&C meeting to review costs, detail next steps

