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| No automatic alt text available. | **WATER POLLUTION SOLUTION****YEAR 7/8 STEM PROJECT OVERVIEW** **VALE PARK PS & NORWOOD MORIATA HS** | Image: 200 pixels |

**Primary Contacts**: Chris Felstead, Luigi Pilla & Sally Weavers

**STUDENT PARTICIPATION & TIME FRAME**

48 students (27 Year 6/7 students from Vale Park Primary School and 21 Year 8 students from Norwood Morialta High School) were involved in the project over a twenty-five-week period. The 48 students were divided into teams of 5-6 students; teams worked together on the project for eight full days (Team Building and Planning, Planning, Testing and Reflection) and collaborated via ‘Google Classroom’ outside of this time.

**PROJECT OUTLINE**

Students worked in collaborative teams of 5-6 to research, design and create a prototype product addressing the problem question: If you wanted to reduce water pollution and increase water quality in SA eastern suburb waterways, how would you do it?

The project commenced with a full day excursion to Drage Reserve and Lochiel Park. Students took part in a scavenger hunt and solved problems and challenges relating to the surrounding environment while getting to know each other in their groups. Campbelltown Council gave an informative tour of Lochiel Park to the students. Students learned about the sustainability measures and the waste pollution strategies undertaken in the Lochiel Park community.

Teams had a series of half-day planning sessions to work in their groups and research water pollution and current methods to reduce it in the local community area.

Teams developed their understanding of water pollution and water quality to develop new or innovative methods to address it.

Teams needed to plan, then create a scale model to demonstrate how to reduce water pollution and improve water quality at the chosen site Lochiel Park.

Teams participated in a workshop on the engineering design cycle, and students fine-tuned their designs and develop experiments to test their designs.

Teams were limited to a budget of $100 from which to purchase materials for their prototype, develop, and carry out their solution. The full costings/budgeting were required as part of assessment.

Teams were able to conduct water testing on site at Lochiel Park for comparison against baseline data in the Campbelltown City Council area using the following parameters: dissolved oxygen, phosphates, nitrates, salinity and pH.

Teams made full use of the G Suite for Education Google Classroom platform to communicate their project progress, share vital information and refine key documentation on the project.

Teams were required to display their prototypes and present a portfolio of their learning including a reflection throughout the project to Campbelltown City Council in a ‘Shark Tank’ style mini-showcase exhibition to allow for feedback to be provided on their water pollution solutions.