Tawa students design for the future

A park in Linden will get a revamp thanks to a design project involving students from Tawa Intermediate and Linden School, in collaboration with Wellington City Council.

"This project is a really good example of a cross-curricula activity which has a real value to these young people and their community."
Brendon Henderson

Across-curricula project involving a group of Year 7 and 8 students from Tawa Intermediate and Year 6 students from Linden School will contribute to a new look for Wall Park in Linden.

The initiative is a collaboration between the two schools, the Tawa Technology Education Trust and Wellington City Council. The proof-of-concept project, involving children in the development of public spaces, aligns with the trust's objectives of equipping the youth of Tawa and Linden with the technologies of tomorrow.

Schools go 3D

The trust was established after local businessman Tony Hassed read an article about how low-decile schools benefit from having access to 3D printers as they learn to use technology while getting tangible results.

In 2017 he donated a 3D printer to Linden School (decile 4). The trust was then set up and by the end of the year, all eight Tawa schools including Tawa College, had 3D printers.

The trust comprises the chairman, Tawa Intermediate principal Brendon Henderson, three Northern Ward councillors (including Wellington's deputy mayor Jill Day), the chairman of the Tawa Community Board, and Tony Hassed as business manager.

"The Wall Park collaboration came about because Jill Day, a Tawa resident, said the council had some budget for Wall Park and that the trust might like to be involved," Tony says.

The students have worked collaboratively to understand what the park needs, and a community survey revealed what people like and don't like about the existing park. Working in small groups of mixed ages, the students refined their designs to come up with final concept designs for the park.

First steps

"Three council staff turned up in April, briefed the kids, gave them a survey sheet and asked them to get five responses each from people in the community about the utilisation of the existing park," says Tony.

"It's a neglected area at the end of Linden. The council plans to do up the park and is going to use whatever the kids come up with as a basis for developing the park. It's in a cul-de-sac and we want to find something that makes it unique."

The survey results showed a desire to develop community spaces and have better play equipment, with the wish list including a flying fox, climbing net, slide and basketball court.

Groundwork

Earlier in the year, the children were taken to Wellington's Botanical Gardens and Mt Victoria to assess playgrounds, expand their knowledge about different types of play and consider how this could influence their designs of Wall Park.

They then went to Wall Park to measure it up, learn about existing environmental conditions, hazards and usability.

"In June, staff from Wellington City Council introduced the children to design thinking including the use of bubble diagrams, which is basically sorting the park activities and equipment into different spatial areas," says Tony.

Once the conceptual work has been done, the students will be introduced to software provided by the Tawa Technology Education Trust. They will use drawing software programmes and it is hoped that the drawings can be printed by Victoria University's large 3D printer.

The students want the Tawa community to see and celebrate their design concept and to understand what they have learnt about design processes.

The project was a perfect opportunity, says Brendon Henderson, for Tawa Intermediate and Linden Schools to meet a range of objectives, including incorporating community aspirations and reflecting the open-ended nature of *The New Zealand Curriculum*.

Learning about design and technology

The students did a lot of measuring, survey data collection and analysis, interviewing and recording material. They are currently learning about design and technology for the project.

"They have gone through how to do the design process that council designers use when developing plans, which is pretty cool," says Brendon. "This has included using rubrics to compare and contrast playgrounds. They will then learn to use a computer design programme to draw their concept plans."

The project has also been an opportunity to learn soft skills, which the school values, such as collaboration, cooperation and communication.

"We don't know what the future of work will be and the sort of environment our kids will walk into in 10 years' time," says Brendon.

"But along with a lot of schools in New Zealand, we think that if our children are leaving us with social, emotional and educational dispositions that are culturally connected, and if they have skills to work independently and collaboratively, they will go into most situations in the future and be successful."

The children have jumped into the project with great enthusiasm and have a great sense of pride in being involved, he says.

"The benefit is they will be able to see something they have contributed to that is tangible and worthwhile. This project is a really good example of a cross-curricula activity that has a real value to these young people and their community."

The Wall Park project is one of four projects the Tawa Technology Education Trust plans to do this year to help equip the suburb's young people with knowledge and skills in the application of future technologies, such as robotics, coding, AI and virtual reality.

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Playground design not child's play

The children involved in the Wall Park project have each written a narrative about their design. Here are some of their ideas:

Footpaths and a flying fox

"Flower gardens for colour and to make it more attractive. They should be planted with care, and maybe the people coming should be encouraged to help plant and water the garden. I chose a flying fox because it would be a good use of the slope, the same reason for the slide. I added the tree stumps and logs for more imaginative play. They can be stepped on, jumped over and climbed over as well. I chose these things because I thought it would be convenient, fun and attractive for the park. Thank you for this opportunity, I'll always remember it." *Mina, Year 7*

Fountain and gym equipment

"What I have in mind is a fountain and two gardens because not many parks have fountains or two gardens. It makes Wall Park unique and special and it draws people in. Since I mention we want Wall Park for all ages, we can add a gym for adults, because adults need to do something as well. I've enjoyed designing Wall Park because I love designing and working with the Wellington City Council." *Emily, Year 7*

BBQ and safe spaces

"The gate at the front middle is 1.5 metres wide to allow people to get through, but no cars. The path from the gate is 1.5 metres wide. The main path still goes down the middle of the park, until it reaches a lookout and benches to watch people (like your kids) on the flying fox, and the trains go by. There are two tables next to the BBQ and shelter, where you can eat and watch your kids. There is another table in the viewing area of the playground so you can watch the kids play. *Elijah, Year 7*

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Designing with children

Wellington City Council designers have been working with the children on this project. Education Gazette asked team leader and urban designer Stephanie O'Shea about the collaboration.

Q What has it been like working with a group of school kids on a project like this?

A Really fun; it's been a great chance to get out of the office and work more closely with those who will be most impacted by the project in their school and neighbourhood. It's refreshing to hear a child's perspective.

Q What have been the challenges of the project for WCC?

A We are in the habit of using design jargon and discussing quite abstract content, so the most challenging aspect is being able to communicate a complex process so 9–12-year-olds can understand it. Working through the design process, while also aiming to produce tangible and realistic outcomes (budget, feasibility, safety) has been a matter of balance and another challenge. Ensuring students learn the design process – not wanting to hold them back with their ideas – yet aiming to be realistic about limitations so their influence is evident in the outcome of the final park design.

Q Are there benefits to your design processes in engaging with a main group of users – in this case children?

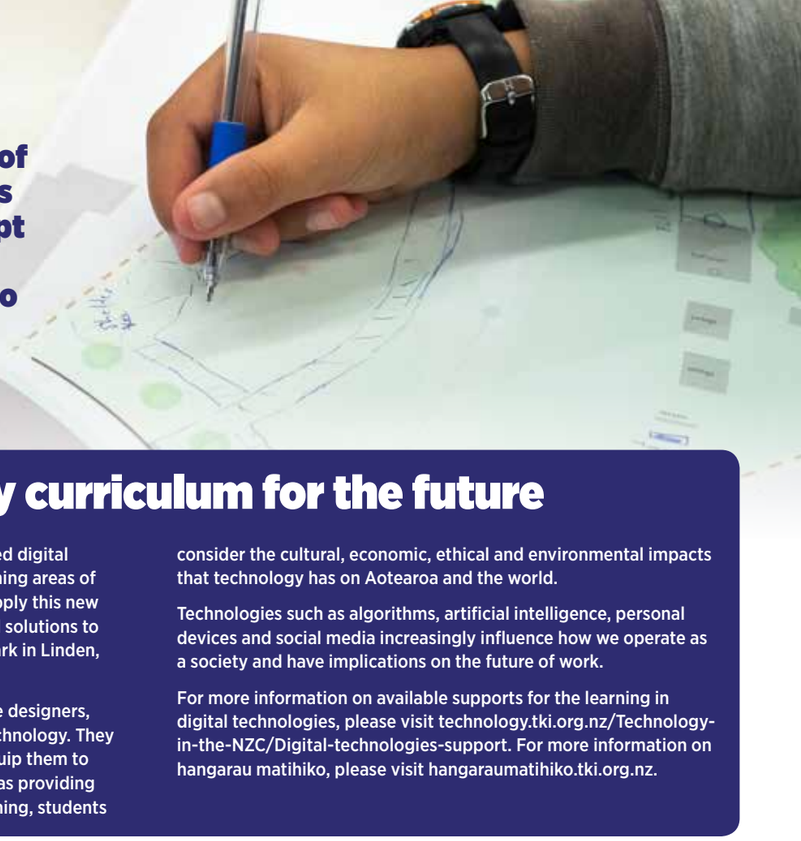
A It's great to have the students establishing a voice and contributing to development within their own neighbourhood. They will be the users of the park so it's valuable and important to have their involvement, so they gain some ownership of the project.

Q How do you think this collaboration will inform and influence the final park design?

A The project is a celebration of the students' design process and ability to develop concept plans. We will look at the common themes and ideas to inform the final design.

Q Will the children continue to be involved in the project?

A When we begin construction next year, we hope to involve the students in helping with planting. They will be invited to join us to celebrate the opening of the park so they can feel proud of how they have influenced its development.



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Stephanie O'Shea

Technology curriculum for the future

The Ministry of Education has recently strengthened digital technologies in the technology and hangarau learning areas of the national curriculum. Students will be able to apply this new knowledge and skills into the design of new digital solutions to real-world problems such as the revamp of Wall Park in Linden, Wellington.

In technology education, students learn to become designers, innovative creators and informed consumers of technology. They learn the technological knowledge and skills to equip them to participate in society as informed citizens, as well as providing a platform for technology-rich careers. In this learning, students consider the cultural, economic, ethical and environmental impacts that technology has on Aotearoa and the world.

Technologies such as algorithms, artificial intelligence, personal devices and social media increasingly influence how we operate as a society and have implications on the future of work.

For more information on available supports for the learning in digital technologies, please visit technology.tki.org.nz/Technology-in-the-NZC/Digital-technologies-support. For more information on hangarau matihiko, please visit hangaraumatihiko.tki.org.nz.