WELLINGTON HIGH SCHOOL A NEW APPROACH TO WASTE

KAIAKO: TINA STOLZE

"There's a problem here, so how do we solve it?"

When look at the waste we generate in Aotearoa (whether it's food, household items, commercial waste, grass clippings, the lot) we generate around 615kgs of waste per person each year, destined for landfill. That's around 3.6 million tonnes yearly for Aotearoa in total - with only 0.3 million tonnes diverted and reused in one way or another (Waste Statistics, Ministry for the Environment, 2023). Schools are in an interesting position - one that contributes to landfill, but also where it's possible to build relationships local issues, create sustainable spaces, positively think about waste, and foster attitude change in young people.

Walk through any building at Wellington High School, and you'll see evidence of a project doing just that. On nearly every floor, every corner, you're likely to come across tidy clusters of bins and boxes. Each of these individual stations are Year 9 Dean and Social Science teacher Tina Stolze's way of tackling the amount of waste their school directs to landfill.

A bit of a "doer", in the two and a bit years she's been at High, Tina has gradually rolled out a schoolwide waste system. What started as initial shock at the lack of a waste minimisation programme, has since snowballed into a collective action project with four students on the payroll, a network of supporters and spillover into the community.

The key: taking it one step at a time.



Year One: taking initial Action

After noticing how much organics and recycling was going to landfill, Tina was motivated to trial a new bin station in class in her first year at High (late 2023). This aimed to sort waste into four main categories: compost, recyclables, landfill and paper. Discussions led to new knowledge and skills for ākonga - shifting mindsets from chucking everything in the rubbish, to making the effort to put waste into the right bins.

However, with more than 1600 students and around 180 staff, and the two on-site compost bins becoming increasingly full, Tina wanted to involve other staff in growing this project. After organising a staff-wide sustainability hui to share the problem and create a more collective solution, they were able to map the next steps and confirm support. Tina notes that "having collective input and buy-in from the start is key for undertaking anything like this", as well as knowing who will be able to support the work being planned.

Year two: Building a team

Tina had her bin stations in her classroom for two terms in 2023, before rolling out additional stations to the whole Social Studies floor at the start of 2024 with the support of Tina's Head of Faculty and social studies colleagues. This included six classrooms, open space and an office.

After the classroom trial and the floor rollout, Tina said that a project like this 'needs to be a part of the infrastructure', something the whole school does regardless of who's driving the programme.

Near the end of 2024, Tina pulled a board proposal together, which outlined a plan and a budget to implement the programme for the whole school - a station for each classroom, shared areas, offices and corridors.

There was an element of this successful proposal that would be key to growing the entire project, and would also make it easier for kaiako to support having the new bins and accompanying posters in their classrooms - the ability to employ students and pay them the living wage to help sort the waste each week. A proposal should establish the need for the project, how it will benefit the school/community/students, how the issue will be tackled, the proposed budget and if any grants are needed. The budget part can be tricky - in this example Tina underestimated how long it would take the students to clear the bins in each area, so their weekly hours were longer than anticipated, something to keep in mind if you're doing a proposal of your own.

"Having keen students is one thing, but being able to renumerate them is another - you're not just relying on the passion they have for the environment".

There were also plenty of logistics to sort before the full-school rollout, including working with a student to create clear and effective posters for above each bin, to help their peers understand where to put their waste. However, behaviour change isn't always straightforward, and having accessible bins and signage didn't always mean each piece of waste went into the correct category.

In late 2024, a Year 13 student also organised a waste audit, which helped support the kaupapa. In a school context, "'waste' is everything that would have been disposed of as rubbish and could include the contents of rubbish bins, kitchen or canteen scraps, packaging, office paper" (Waste Audit, Enviroschools) - essentially everything that was used in the classroom (or across a whole school) in a

day, as well as what comes to school with students in their lunch boxes or nearby dairies. By saving all the waste the day before your waste audit, you can then weigh it, survey and categorise it, and work out the total volume of all waste produced in each of your categories.

Measuring and data collection, implementing actions from waste audits can fit within a range of achievement objectives across subjects, from Education for Sustainability, Mathematics and Statistics, Social Science, Science.

Asides from paying students to maintain and sort the bins each week, a key requirement from the Board was to keep associated costs down. However, with 110 bin stations (and counting) to implement across the school, this meant Tina spent a fair amount of time taking it upon herself to drive around Wellington, sourcing bins from school whānau and members of the public.

She also reached out to organisations for support, to help provide the equipment needed to set up each station. Tina and Wellington High were provided with five worm farms donated from Mitre 10 and Why Waste (no more clogging up the Hort teacher's compost bins), Wellington City Council sourced 30 plastic compost collection bins, and the local Bunnings helped make up the rest.

"[Bunnings were] amazing at giving us what we needed, and we are also trying to just make do with what we've got".

Once the bins and worm farms were sourced, it was also important to make sure the kaiako in the additional classrooms were aware of what belonged where. Sharing information about the programme to all staff also included a Kahoot that Tina put together for teachers to complete with their students, which covered information about the project, explanations and questions - helping both kaiako and rangatahi to buy into the project.

Once Tina collected and signposted enough bins, the full-school project was underway.





Year three: Full School Programme

Currently, there are four students employed to manage the 110 bin stations - one student per school area. They each work for around 2.5 hours a week, all earn the living wage and on an official employment contract with the school. They are responsible for clearing the compost bins in their area twice a week, the recycling and paper bins once a

Students need to be over sixteen to be employed for this role, and it was initially students from the Roots and Shoots student group that were keen to do the work. The word quickly spread however, and Tina gained some additional team members as a result! week, and reporting any issues to Tina. The school's cleaning company handles the rubbish bins.

Paying rangatahi to help tackle this issue weaves in real-world skills (reading and understanding employment contracts, understanding what's required to maintain the programme in their area, logging hours and monitoring resources) with tangible environmental action. It's also resulted in Junior students showing interest in getting involved, which is a great way of ensuring the programme will continue over time!

Support Systems and Community

Thanks to Tina's gradual scaling of the project and her communication with staff, the composting and recycling has been reasonably well received by kaiako and leadership. However, she reiterates that this takes time and work, and highlights the importance of communication, learning who is supportive of the project, and who you need to build strong relationships with to make things go smoothly as possible.

For Tina, the key people internally supporting her project include:

- The groundskeeper and maintenance team, who help organise the bins and who are generally responsible for ensuring the school is tidy and clean.
- The school's business manager, who keeps record of the waste collected from the school to compare the change in numeric tonnes over time, and the payroll administrator who processes the student's wages.
- The Principal and Board, who wholeheartedly support the project and the budget required to pay the students.

Externally, Tina's support network includes:

- Wellington City Council's Waste Education team, who helped source equipment and provide information.
- Mitre 10 and Why Waste, who Tina sources worm farms from, and Bunnings.

To add to this network, Tina is all about "encouraging the spill-over of the project into the community". Newsletters are one avenue used to celebrate the mahi students are doing, as well as letting whānau know that there are plenty of worms from the school's worm farm to share with who needs them. The main avenue for this spill-over though, is the employment of the students themselves. When discussing this part of the project, Tina shares that it just made sense to support students, and therefore families, with the paid work first, rather than large-scale businesses.



Learning, advice and next steps

Getting to this point hasn't been without barriers and the need for trial and error. Funding and taking the time to write grant applications is one, shifting automatic responses of students is another.

'It's more difficult than you think to encourage behaviour change across the entire school, and year groups!'

Moving from the subconscious mentality of 'everything goes in one bin' to categorising your rubbish takes time, and can result in unexpected problems. One example Tina described was one that you'd rarely think about when starting a project like this - having different sized bins. "The bins we got from Wellington City Council were taller than the ones from Bunnings, so the first response from the students is to put their rubbish into the tallest bin that's physically closest to them - regardless of whether or not it's the right one." The advice? Think about the bin height at each of your bin stations! Additional advice from Tina includes: Using long-life plastic bins as opposed to cardboard for compost bins, make sure you have your bins in a location that you can attach signs above (stone walls mean that staples and bluetack won't cut it), to make sure you have a process for your students to report if any bins are damaged and need replacing/fixing, and to ensure teachers know which students to approach if their area needs sorting. Remember that if you're in a large school there can be less ownerships of problems like waste from the students and therefore the solutions, so to take time to understand and work within this.

Discussing the curriculum and teaching moments is another consideration. 'There's a need for everything to tie into the curriculum, but if you do the right thing, the learning will come along with it".

Ideally for Tina, being able to set a project like this up and then walk away from it would be the best outcome. "With around 1800 people in the school it takes time". Once it's at that point, then Tina has some next steps in mind, including working on the bins outside in the school grounds, being able to employ rangatahi to maintain the worm farms, recycling soft plastics, having students working with the cleaning contractors to sort the rubbish before it's collected, and sorting metal (how good does sending waste metal to the recycler to get money back for the school sound?). The ultimate would be having enough support to become a Zero Waste School - maybe when there's more than one kaiako running the show.

If you're thinking of starting something similar at your school, Tina has some additional words of advice to help you on your journey:

- "If you're unable to pay your students to clear the bins, then make sure you offer something else that makes it worth it, take them for a group trip, pay for some school lunches, for example.
- Understand who your allies are, and build on that. Share the kaupapa and work on building those relationships first... something like this is too hard to do by yourself, compared to with others involved.
- Be realistic about your project and how much capacity and time you have".

This project makes sense. Supporting students and whānau with paid work, with knowledge (and garden worms), keeping organics on-site so they can turn into soil for the gardens and in general, saving the school money in terms of waste pickup, and diverting as much from landfill as possible is huge. It's also important to note that it's huge for Tina - she's been responsible for the paperwork, managing students, printing, laminating and maintaining 440 signs for all of the bin stations, educating students and teachers, applying for grants and sourcing bins (even considering driving to other regions to pick up more). By taking the massive issue of waste generation in Aotearoa, breaking it down into bite-sized chunks that centres the role of the students, Wellington High has made a positive impact. While Tina notes it's still a drop in the bucket compared to complex climate change, if it's not even happening at all in the first place then what's the point?