

Student experience context paper for Waipapa Taumata Rau's Sustainability Strategy Development (Feb 2022)

Taumata Teitei has several references to sustainability, including naming "*Leading transition to sustainable ecosystems*" as one of four interdependent priorities. It also states that we will be "*a global leader in sustainable practices through education*". There is a vision for students to "*possess an intimate and deep sense of cultural identity, social justice and civic duty and sustainable practices, which will be demonstrable in their actions and interactions. Our graduates will stand apart from others in their readiness to play leading roles in public debate and in matters of relevance to our communities*". One of the strategic priorities is "*graduates who make the world better tomorrow than it is today*". It is also stated that "*kaitiakitanga will be evident in our approach to sustainability and woven into everything we do*" and "*our campuses and precincts will showcase our innovation*". The "leading transition" priority in Taumata Teitei has been expanded in other documentation to include reference to abundance: "*leading transition to sustainable and abundant ecosystems*". In this context paper we work from this core aspiration for environmental sustainability and the other priorities related to student experience outlined above, to invite discussion on how they may be achieved.

Relationship to concurrent work on curriculum transformation

The Curriculum Transformation Taskforce (CTT) has included a Sustainability Working Group with representatives from all faculties and the Sustainability Office. That group has held consultation workshops with faculty staff, gathered information on current teaching related to environmental sustainability at the university, worked closely with other CTT working groups including the Transdisciplinarity, Innovation and Entrepreneurship (TIE) and Learning and Teaching Delivery groups, been informed by the values and practices of kaitiakitanga, taken account of the proposed new Graduate Profile (GP), and conducted research into national and international models for providing students and others with opportunities to explore and develop sustainability-related knowledge, values, skills and practices.

Principles for sustainability-related student experience

The following principles are drawn from this work and the aspirations of Taumata Teitei. They include associated questions.

- 1. All students are exposed to sustainability teaching and/or experiences.** Sustainability is evident in many programmes, but not all students receive the teaching required to meet the aspirations of Taumata Teitei and the proposed GP. Should some level of exposure be offered at a university-wide level and if so how? Should the responsibility be at the faculty level? What are the staffing, resource and support implications of these options? How likely are each to fulfil the university's aspirations?
- 2. Sustainability teaching and experiences include an emphasis on developing intra and interpersonal competencies, critical thinking, and the capacity for collective problem solving.**¹ This will encourage students to feel empowered to take action, participate in social debate and work well with others. How can we best ensure all students have the opportunity to develop these skills?
- 3. Transdisciplinarity is an intrinsic part of sustainability learning.** The role of transdisciplinarity is recognised internationally as critical to responding to the 'wicked problems' we face.² How do we draw on the depth and breadth of knowledge and research-based expertise at our university to ensure students are exposed to viewpoints beyond their own discipline? How do we provide them with

problem-solving opportunities that draw on multiple disciplines and the outside world?

4. **Opportunities to specialise in sustainability are available for all students.** Many universities now have degrees related to sustainability, including in NZ.³ How can we provide opportunities for more advanced learning? How do we provide transdisciplinary opportunities for post-graduate students?
5. **The university visibly demonstrates sustainability efforts in its campuses and operations.** Considerable learning happens through observation and practice. How do we ensure that the university's sustainability efforts are visible to students and beyond? Can we integrate place-based experiences and the design of sustainability solutions for the university into our programmes?
6. **A variety of sustainability learning opportunities exist outside the formal curriculum.** Research into other tertiary institutions shows that many encourage and support student-led and staff-led initiatives.⁴ These initiatives have not only helped green campuses, but also reached into the community, sharing the expertise of the university and giving students work-related opportunities. How do we support student-led initiatives?
7. **A formal hub ensures sustainability teaching and extra-curricular activities are appropriately coordinated, resourced and supported.** Currently the university does not have a centre or similar that coordinates and supports university-wide sustainability teaching and related activities.⁵ What do we need from such a hub? How should it align with research, teaching, engagement and operations? Should it offer its own programmes and courses, and if so what would they be? How do we ensure all faculties are fully represented and feel ownership of the hub? What lines of accountability and communication would ensure that it is well connected to both senior management and staff and students?

Mechanisms for putting these principles into practice

Here we outline four possible mechanisms that have been proposed via the CTT process and the university's 2021 call for Transdisciplinary Research Centres focused on grand challenges. These are highlighted to demonstrate solutions that meet multiple university aspirations including those for sustainability-related student experiences.

1. A set of flexible, university-wide modules/courses or a super-course with a transdisciplinary problem-solving focus: *Responding to Wicked Problems*. A university-wide set of modules or a super-course would ensure all students are exposed to sustainability issues and skills and allow for a transdisciplinary focus.⁶ Such a 'course' would also provide the opportunity to develop relational teaching methods, with these being a core aim of the CTT. It could combine some digital delivery and assessment with in-person small group problem-solving and offer considerable flexibility to students in their choice of 'wicked problem' and format for group work. *What are the advantages, disadvantages and resource implications of such a course? What are alternative mechanisms for ensuring exposure for all students?*

2. Vertically Integrated Projects

Vertically integrated projects (VIPs) would give students the opportunity to engage in transdisciplinary, sustainability-focused problem-solving. VIPs are multi-year projects that enable students to participate in research throughout their education and have been successfully developed at numerous universities around the world.⁷ A transdisciplinary VIP focused on sustainability would offer students the opportunity to deepen their knowledge and skills relevant to tackling significant global challenges, by working collaboratively with students and staff from different disciplines, as well as members of the affected community. *What are the advantages, disadvantages and resource implications of VIPs? If offered, how would we ensure equitable access and a wide definition of 'research'?*

3. Student Engagement Programmes

Student engagement initiatives from all parts of Waipapa Taumata Rau could be reviewed and reformed to better deliver co- and extra-curricular sustainability learning

opportunities. In the same vein, the current co-curricular record and Distinguished Graduate Award programme could be reconfigured to incorporate more substantial requirements for sustainability and other 21st century competencies⁸. A facilitated Living Laboratory programme would enable teams of students, professional staff, and academic staff to work in partnership to tackle campus operational sustainability challenges. Such a programme would help deliver on the university's aspirations for a net-zero carbon status, and would equip students with skills for implementing sustainability in their workplaces and careers. *What are the resource implications of a review and re-configure of current student engagement and recognition initiatives? What are the resource implications of a Living Laboratory programme? What are alternative extracurricular mechanisms for ensuring all students have the opportunity to develop practical, entrepreneurial and leadership skills around sustainability challenges?*

4. A Transdisciplinary Centre for Sustainability that would bring together research, teaching, engagement and operations. A TRC proposal is currently under development, *Ngā Ara Whetū: Centre for Climate, Biodiversity and Society*, partly informed by the Grantham Institute model.⁹ *What would a TRC need to look like to ensure that teaching is a key focus? Should it focus on developing its own programmes or on developing resources and networks that allow faculties to integrate sustainability teaching into their own programmes – or both? How could it encourage and support student and staff-led initiatives outside the formal curriculum? How would it be staffed and resourced? Would it have a physical location?*

For further information

The CTT sustainability working group is developing a detailed working paper with additional information related to this context paper. For the latest version please contact Charlotte Blythe. You can also view a sustainability panel discussion included as part of the December CTT updates [here](#).

Contacts: Niki Harré n.harre@auckland.ac.nz; Charlotte Blythe c.blythe@auckland.ac.nz

¹ These competencies are in alignment with CTT faculty consultations and were highlighted in a recent Delphi study, [Brundiars et al. \(2020\)](#)

² See [Brundiars et al. \(2020\)](#)

³ For example, the University of Canterbury now offers a new [Bachelor of Social and Environmental Sustainability](#), and the University of Waikato offers a [Bachelor of Climate Change](#) (both new for 2022).

⁴ See [Oxford Climate Society](#) for an example of a student-run society, and [Green Your Scene](#) for an engagement programme led by the University of Otago's Sustainability Office.

⁵ For a possible model see [The University of Plymouth's Sustainability Hub](#)

⁶ For a possible model see Anglia Ruskin University's [Ruskin Modules](#)

⁷ See for example, [Georgia Tech's VIP](#).

⁸ Bristol University's PLUS Award, for instance, requires students to complete three "FutureLearn" MOOCs, including one course on [Sustainable Futures](#)

⁹ <https://www.imperial.ac.uk/grantham/>