



Sustained Excellence
in Tertiary Teaching
General Category

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“Statistics show that those with a higher education have improved outcomes in terms of health, wealth, and overall happiness. Facilitating access to education for under-represented groups is a key goal for me. In particular, I want to understand why comparatively fewer Māori continue in science, or go on to achieve Level 1 NCEA”.

As Brendon loved growing up by the ocean, studying marine biology felt like a natural progression for him. But his journey to tertiary teaching was not typical. Success didn't come easily to him as a student but, as he progressed and the material became more interesting, he improved significantly. He, therefore, empathises with struggling students and helps them succeed by assuring them that it's OK not to be perfect and to improve incrementally. Being pākeha, but immersed in Te Ao Māori, has also shaped him as a teacher. He and his wife (Taranaki iwi) sent their two daughters to Te Kura Kaupapa Māori o Ngā Maungarongo for their education, which exposed him to a whole new way of learning and 'knowing'. Having taken months to feel confident speaking Te Reo to the girls' teachers, he gained insight into what it is like to be outside one's comfort zone and how difficult it can be for his University students to risk asking questions when they feel overwhelmed and out of their depth. He also saw a different teaching philosophy *Te Aho Matua* in practice and the respect for students that was embedded within the curriculum. This initiated his frustration with the barriers to Māori entering University/sciences, and his desire to show University as a viable option for Māori rangatahi.

Brendon predominantly applies an active learning approach as evidence shows this results in greater engagement and factual recall than passive activities such as lectures. Brendon establishes a trusting student/staff relationship and creates a safe, inclusive learning space from his first encounter with a class. Drawing from his observations of and respect for Māori ways of teaching and learning, he shares something of himself and asks students or groups of students to introduce themselves. He signals his intention to reduce stress by pacing learning and content delivery and returning to simplicity. Instead of the latest sophisticated learning technology, he uses paper as it requires no updates and its operating systems do not become obsolete. These simple teaching tools allow him to slow down content delivery, remove distractions, highlight what is important and improve learning. It also allows him to inject fun into the class (getting students to perform/dance/act out a concept) and explore a concept more fully. He provides the intellectual framework and expects students to fill in the gaps with readings.

To increase student engagement, Brendon has introduced a series of hand actions and body movements into his teaching. While taking a Te Reo Māori class in 2009, he noticed the ease with which new kupu/words were learnt when coupled with a hand action, such as during a haka, and wondered whether this would work for Zoology, which is dense with technology. He developed this technique to help students learn the traits

of the Phylum Chordata (e.g. dorsal hollow nerve cord, muscular post anal tail) in *Comparative Animal Biology*. Not only did this approach prove effective as a learning tool, it was a chance for everyone to look silly and fill the lecture theatre with laughter.

Brendon has also used dance to teach courses that can prove challenging for students from non-traditional backgrounds and who may have failed to achieve University Entrance. To help students learn conceptually difficult material, he has choreographed a dance that students perform in lectures to learn the *Central Dogma of Molecular Biology*. This offers an opportunity for the class to move and associate aspects of their movement to steps in the process of producing a protein.

In 2013, Brendon trialled another teaching innovation (Lab+lecture) which replaced lectures with tutorials. Lecture content was delivered in laboratory sessions where students could perform short interactions with lab experiments that illuminated the content delivered in mini-tutorials. By interacting with teaching materials, rather than passively listening, students found their understanding improved. It also helped them bridge the gap between school and university assessments. Brendon finds supervising postgraduate students highly rewarding and is proud that 10 of his 38 postgraduate students are of Māori and Pasifika heritage, and that two of these were taught by him in the foundation programme.

“Whilst predominantly a service role, my Tuākana work spills over into my teaching. It has made me acutely aware of the barriers Māori and Pasifika students face at University and evermore determined to help break them down. The contribution I can make is to show that Māori and Pasifika success is everyone’s responsibility, not just the role of Māori and Pasifika staff.”

Brendon’s passion for teaching has been recognised with awards from his University, his Faculty, and his Department. He has been involved with University Learning Enhancement Grant projects (2006, 2008, and 2018) to try new approaches and develop new resources. He is academic coordinator of the Tuākana programme, a learning community for Māori and Pasifika students across the University of Auckland. He represents Māori and Pasifika student voices on departmental executive and Putaiao committees, working on introducing bilingual signage and greetings and how we might best teach Mātauranga Māori within the curriculum. He also contributes to teaching strategies that will equip his students for tomorrow’s world and is proud of establishing in 2019 field trips to Takaparawhau (Bastion Point) in partnership with Ngāti Whātua Ōrākei. The objective is for a dataset to be accumulated by students over the next 30 years which, in will assist Ngāti Whātua Ōrākei, in the restoration of their ancestral lands.

To try and increase Māori participation in tertiary education Brendon provides talks on science and scientists to Māori rangatahi. He assists the distribution of surplus scientific equipment to schools and provides day-long marine life workshops for Year 10 students as well as participating in professional development days for secondary school teachers. He helped set up the First Year Science Educators Colloquium (FYSEC formerly FYBEC), a group of stage one lecturing staff from New Zealand and Australia who meet annually to share best practice and helped organise, host and present at its 2012 conference. He has been part of teams that have received University Learning Enhancement Grants to develop teaching initiatives such as StudyTXT cell phone flash cards (2006); a website for the McGregor museum for teaching purposes (2009); and the use of virtual reality software in teaching (2017). His expertise has been sought on multiple Curious Minds applications being led out by the Leigh Marine Laboratory staff, and also on Ngāti Whātua Ōrākei’s successful Matatahi Putaiao bid in 2016.

“I love teaching. I find it exhilarating, demanding, and deeply rewarding. I see it as my ‘mission’ as an academic to guide students to have the confidence to question, innovate, and ultimately improve the human condition.”