

2020 Tertiary Teaching Excellence Awards General Category

Nomination for Anuj Bhargava

School of Medical Sciences
The University of Auckland



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Excellent Teaching in Physiology – a holistic approach

Learning is deeply personal. Students acquire knowledge best when teaching is tailored to their specific requirements. I put students at the centre of my teaching and connect with them as distinct individuals. Each year I teach physiology to approximately 800 second and third-year UoA Medical (MBChB) and Bachelor of Science (BSc), students in lecture, small-group and laboratory settings. Whether in a large 400-person lecture, or in small-group teaching, each student gets my respect and attention.

Reflecting on how I was empowered through enthusiastic and respectful teaching has made me a better teacher. I grew up in India and always wanted to help people: teaching gives me that opportunity. Having faced my own challenges during my medical degree, I enjoy creating positive learning experiences for my students. After a life-changing opportunity as a medical teaching fellow at the University of Otago, I joined the University of Auckland's Physiology department in 2005.



Physiology studies the body's functions, illuminating the inter-workings of systems centred on organs like the heart, lungs and brain. It is a cornerstone subject for understanding medicine, relying on abstract concepts. It is demanding of students, but also has clear practical and personal implications. My medical training enables me to translate the field's abstractions into real-life examples. I create clinical scenarios for students, showing physiological principles working in real bodies. I also encourage them to relate physiological concepts to the working of their bodies. This contextualises and substantiates the ideas. Superficial, rote learning is inadequate; students need

deep understanding of key concepts. Mastering these ideas rewards them with a new level of life-long knowledge. 'Oh, I get it now!' moments drive my teaching and my search for innovative teaching methods.

I relate easily to students and sympathize with their challenges, fostering learning environments that build empathy. My approach is holistic. I prioritise understanding my students and their backgrounds, recognising their needs at different stages and facilitating their progress to graduation. I endeavour to create inclusive environments where effective learning and creativity flourish. Contributing to their growth as individuals makes my role very special.

My students come from diverse backgrounds. We have Māori and Pasifika students, international students, and some who are the first in their family to attend a tertiary education provider. For many, English is their second language. This rich diversity has inspired my teaching framework **(Figure 1)**.

Something as simple as greeting me in my native tongue, plays a part in restoring my confidence that I can achieve what is seen as uncommon for someone with my ancestry. Thank you Anuj for always being there for your Māori and Pacific students - as a teacher, as an advisor and most importantly, as a friend.

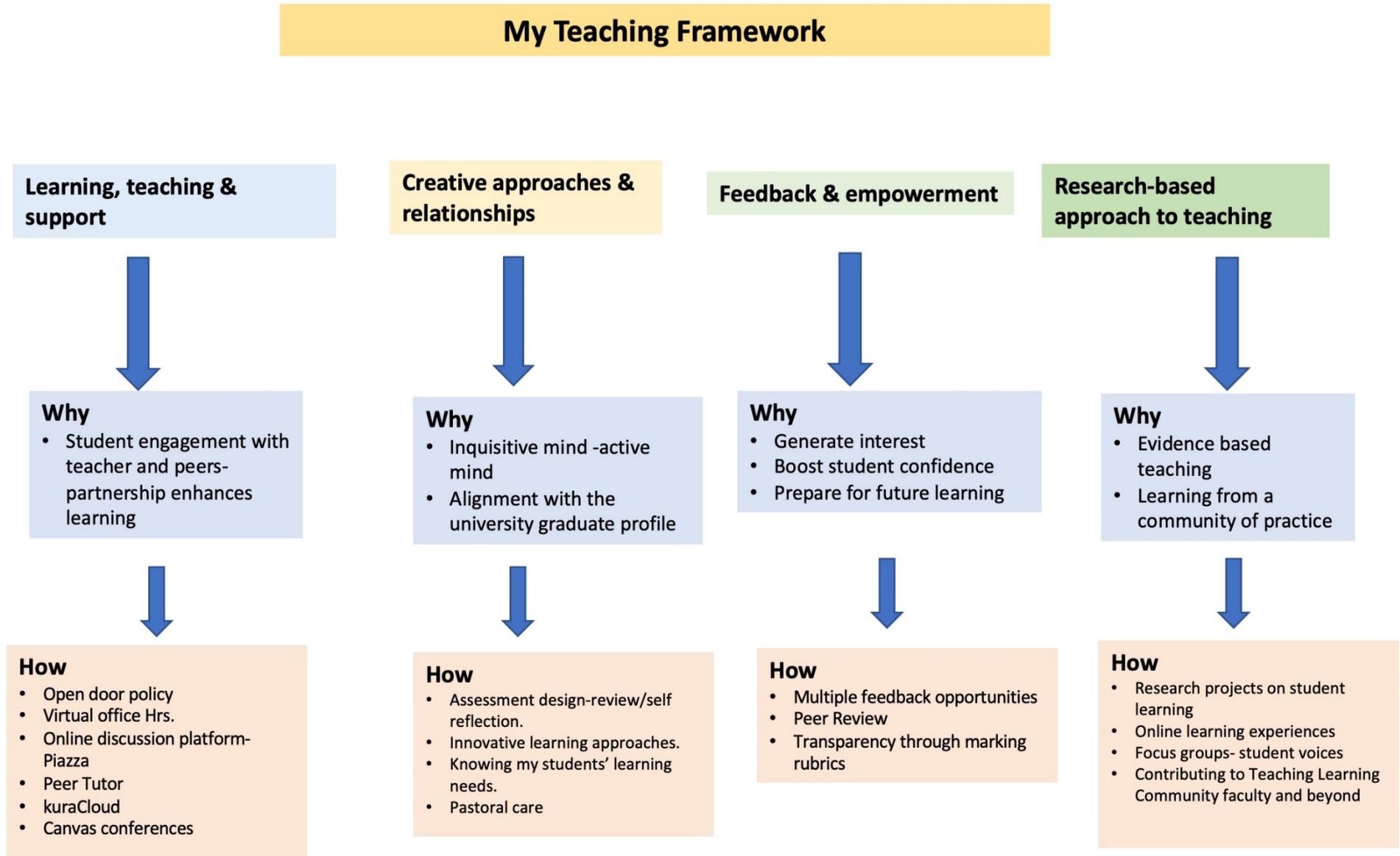
Student, MBChB 221, 2019

What happens outside the classroom is another important aspect of excellent teaching. I provide my students with meaningful engagement with industry contacts and prospective employers via networking, professional development events and career expos. Knowledge should be shared. I seek opportunities to collaborate with peers and disseminate ideas about learning and teaching. For example, I facilitate Teaching and Learning Community professional development sessions. I have an open-door policy for staff, acting as a sounding board for teaching innovations, and actively promoting best-practice teaching.

Anuj is an influencer for positive and meaningful teaching relationships in the T&L community at the UoA and beyond. He has encouraged the forging of strong bonds and mutual support networks amongst those who care deeply about teaching. It is no exaggeration to say that he lives and breathes whanaunatanga.

Andrew Eberhard, Graduate School of Management, 2020

Figure 1: My Teaching Framework



Engaging students in the study of physiology

Anuj is always willing to spend extra time after labs or lectures breaking down and explaining complex physiology concepts in an understandable way, all the while cracking jokes to put you at ease.... I always felt I could ask for help ... he would make sure I had the answers to my questions before I left, no matter how many reiterations and different explanations those answers would take.

Student, MEDSCI 312, 2016

Constructivism dovetails with my commitment to student-centred teaching. Constructivists view learning as a process of making meaning, where the learner interacts with experience and environment to construct knowledge. This model also fits well with the practical, evidence-based aspects of physiology which gathers real-world data and uses it to illustrate core concepts. Particularly in this practical side of my teaching, I support moves towards self-directed, student-centred approaches.



Anuj frequently incorporated clinical or real-world examples into his lectures. These establish why the learning was relevant and would be returned to throughout lectures were frequently interactive; he would ask questions designed to challenge and enjoyed dialogue. This ensured we were actively, rather than passively, processing the lectures.

Student, MEDSCI 311, 2015



My annual teaching includes 17 lectures, in both large and medium-sized settings, within the medical sciences and the Bachelor of Medicine and Bachelor of Surgery (MBChB) programme. I also teach 90 hours of small-group tutorials and over 250 hours of laboratories. The laboratories are opportunities to refine concepts in small-group, practical settings, and develop teaching practices that can be used in lectures. MEDSCI 205, a course with a large group of students, involves small-group laboratory-based teaching and lectures. To cater to diverse learning styles, I deliberately employ a wide variety of techniques to explain key concepts. As well as including real-world examples for context, I have created an interactive learning environment by encouraging student dialogue during lectures.



Michael, a 19 year-old student, suddenly felt breathless. He started hyperventilating and became restless and emotional.

He was taken to his GP who could not identify what was wrong with him.
Can you help?

What do you think is going on with Michael?
Anxious/hyperventilating and sweaty... why so?

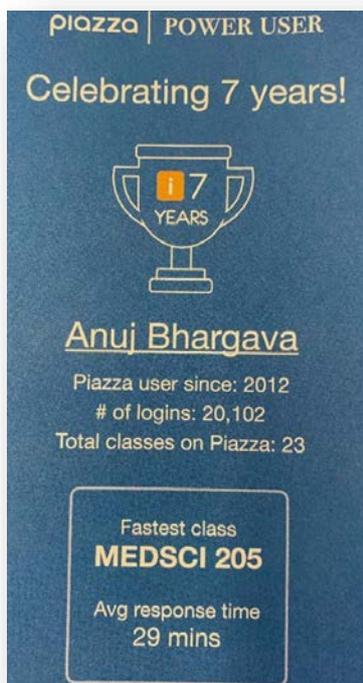
Strategies for learning

Inspiring students requires recognising and respecting different study styles. I actively support critical inquiry, encouraging them to stretch their thinking. I develop assignments such as literature reviews to allow students to gain a sense of the detail and depth involved in scientific research. Opportunities for self-reflection and peer review of fellow students' work further enrich their learning.

*Loved the conferences.....thank you so much Anuj (the real MVP)
Good concept having a LIT review and the peer reviews!*

Student, MEDSCI 311, 2019

I prioritise approachability and individual consultation outside of formal teaching. My informal communications with students provide the impetus for many of my educational initiatives, including a blended-learning initiative within the MBChB programme. I also use an interactive online discussion board, 'Piazza', for 'virtual office hours' (see **Figure 2** for a timeline of initiatives).



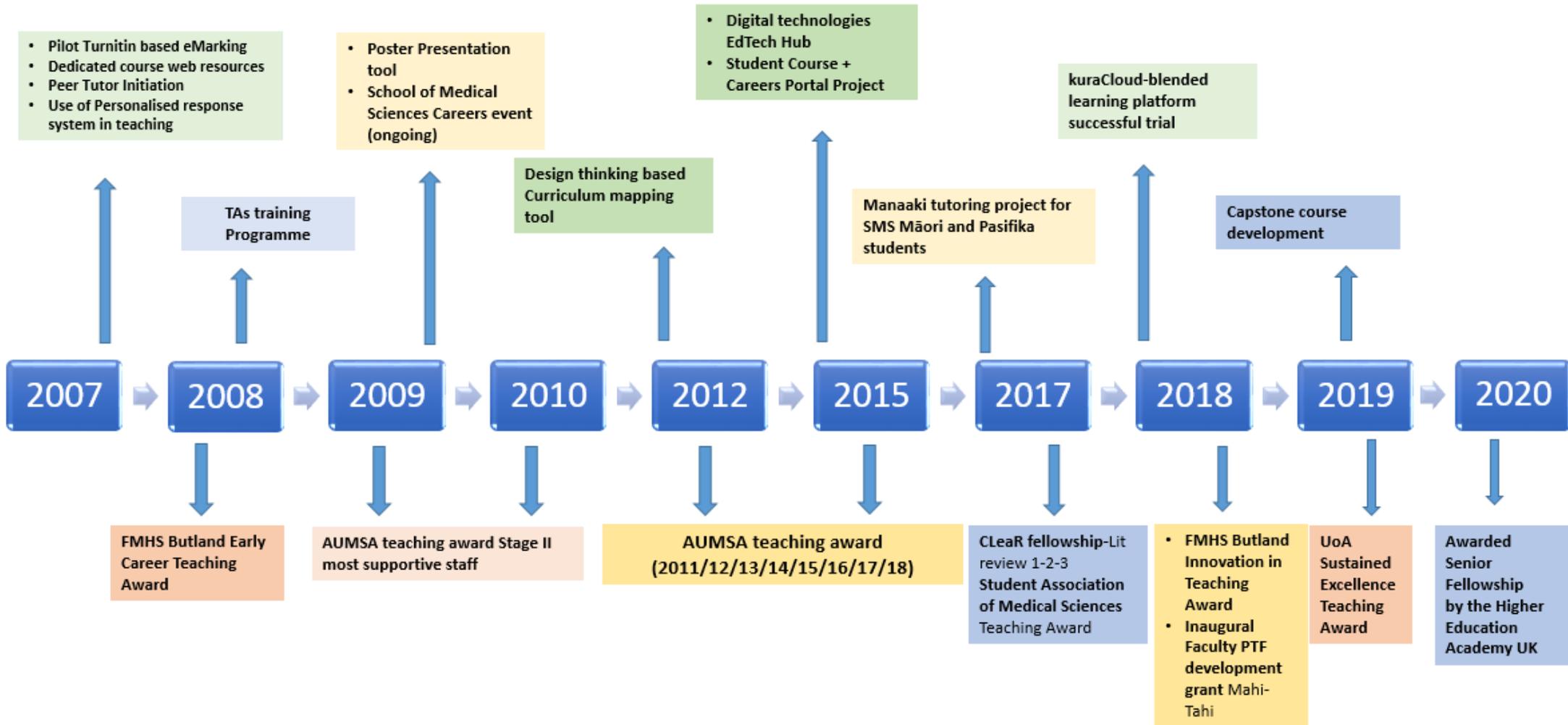
His bright attitude always lightens the mood of students who are constantly struggling, increasing the productivity of our learning. He always answers his email and Piazza questions to assist our learning.

Student, MEDSCI 206, 2019

I have had the privilege of having Anuj lecture in a Stage II Physiology paper... he is easily understood, keeps content interesting, and perhaps most importantly, has a true open-door policy Students want to feel valued and heard. Anuj has a receptive sensitivity – he is a good listener.

Student, MEDSCI 206, 2017

Figure 2: Timeline of my educational initiatives



Effective teaching depends on teachers understanding students as much as students understanding the material being taught. In 2007, I started investigating students' different learning strategies. 'Superficial' strategies are used to learn information but not necessarily understand it. 'Deep learning' develops real understanding of underlying concepts and their application to physiological systems. I introduced a short questionnaire (Biggs, 1999a) to determine whether, prior to commencing my course, students perceive themselves as superficial or deep strategists. I offer them a consultation to help effectively manage their learning. This encourages students' self-reflection – they need to identify learning strategies to discuss with me – and creates excellent opportunities to establish rapport and offer support.

Case-based learning

Case-based learning is an approach where learners take responsibility for their own learning, with the teacher increasingly assuming the role of facilitator of student learning. In my practical laboratory sessions, as well as in lectures, I have increasingly employed case-based learning strategies as they allow students to apply concepts into practice.



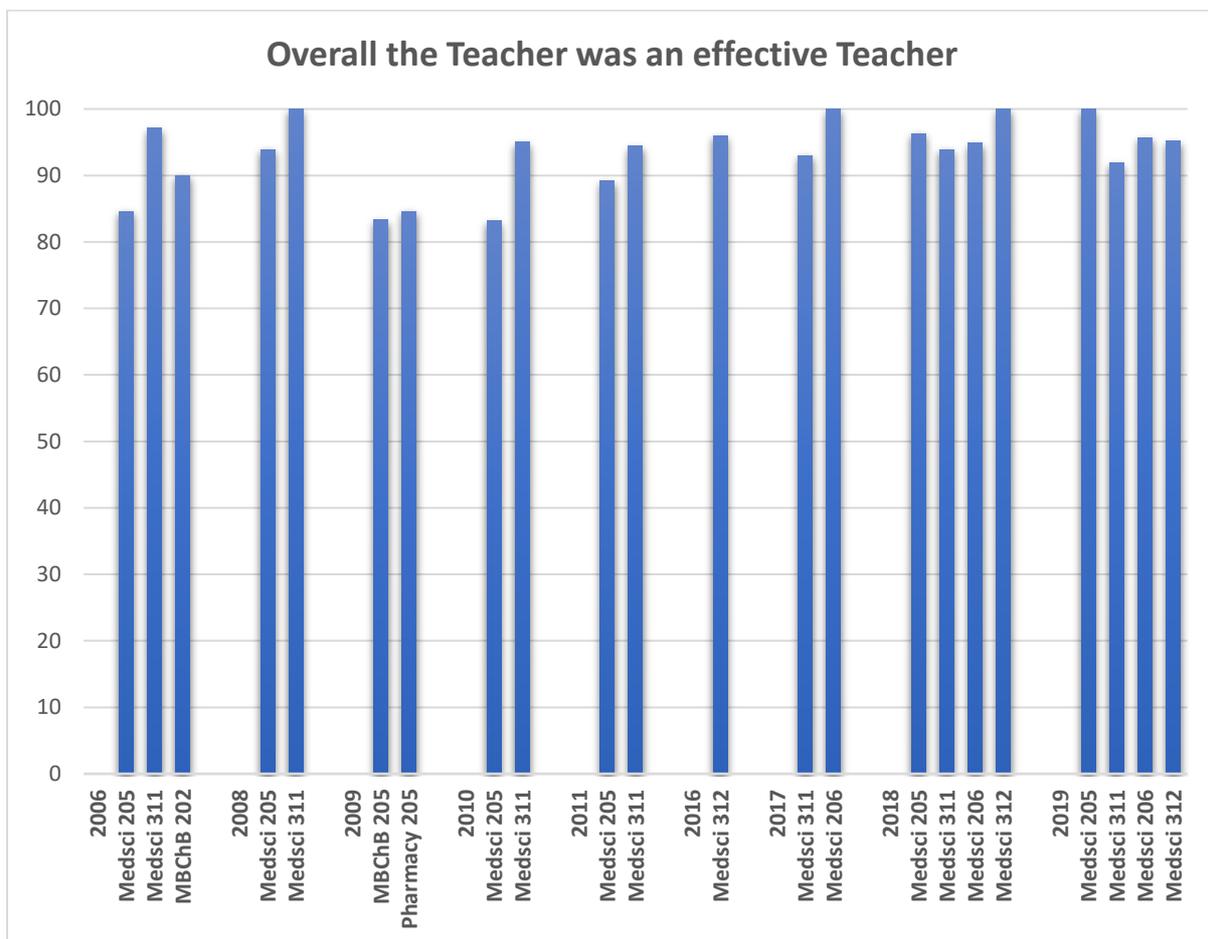
I ask targeted questions to enable students to deconstruct each case study and develop the answer themselves. In 'Sally's Nightmare', Sally becomes dehydrated due to diarrhoea. Students can empathise with Sally – who hasn't had a stomach bug? The scenario explores concepts involving hydration and electrolyte balance. Working through the case encourages students to further develop their critical-thinking skills.

His teaching style ... encourages you to take your learning into your own hands without throwing you off a cliff with no parachute.

Student, MEDSCI 311, 2018

Over the years, positive teaching evaluations have encouraged me to consolidate effective strategies and provided suggestions about further issues my students need me to address. This has prompted me, for example, to include more case studies in my lectures and provide more assessments feedback.

Figure 3: Summary of summative teaching evaluation results



Constructive feedback on assessment

Effective feedback is constructive and development focussed. Assessments should present students with new learning challenges, not just test their existing knowledge (Mylopoulos, 2014). Transparent feedback via robust rubrics is important, as is developing students' self-assessment skills. When designing and marking assessments I aim to scaffold students for subsequent improvement. As a teacher/facilitator, it is my responsibility to ensure that the students embrace the feedback process as active participants.

Anuj really helped me realise how to structure and write my future lab reports. He acknowledged where I had tried to explain ideas or show data ... encouraging comments prompted me to consider what other explanations or ways to show the data there could be.
Student, MEDSCI 311, 2019

Supporting diverse learners

The Faculty of Medical and Health Sciences (FMHS) contains a large number of high-achieving students, but also a significant number of students from diverse backgrounds with diverse learning needs. I strive to deliver information in flexible ways, to cater to the needs of all individuals.

I am a steadfast supporter of the Māori and Pasifika Admission Scheme and of the Faculty's Vision 20:20 objective of increasing the proportion of Māori and Pacific health professionals to 10% of the health workforce by the year 2020. In particular, I am an active participant in the Whakapiki Ake Project – an outreach and recruitment programme that actively engages with rangatahi (youth) Māori enrolled in secondary schools.

Anuj has ability to adapt his teaching style, content and delivery to our Year 12 cohorts is indicative of his responsiveness to rangatahi. Fundamental to this approach is his capability to interact at a level with rangatahi that is encouraging and non-threatening. Anuj had made positive contributions in supporting Whakapiki Ake to help rangatahi learn how to learn.

*Kanewa Stokes (Ngati Porou, Te Whānau ā Apanui)
Whakapiki Ake Development Manager*

Working with my Māori and Pasifika colleagues and students, I have found that Māori Ako values align closely with my teaching framework. Whakamana, collective respect, allows

students and teachers to create safe and effective learning environments together. Learning is mutual: I craft learning opportunities to extend my students' knowledge and they enlarge my teaching skills. Student voices are my inspiration for setting up wānanga, creative spaces, within my teaching domain and developing auaha, creative and innovative approaches.

In 2016, I initiated the **Manaaki academic support programme** to help with needed academic support for Year Two and Three Māori and Pasifika students. 24 Year Two Māori and Pacific students taking MEDSCI courses were invited to participate in the programme with the intention that they would become mentors and role models for the next year's Year Two students. Over the years it has been a big success with a large number of students now involved. It has provided leadership opportunities for many students.

This programme goes a long way towards keeping Grafton Campus an inclusive academic institution. Sadly, Māori and Pasifika students have been somewhat separated from mainstream learning, too many bright sparks without opportunity due to lack of inclusiveness. The Manaaki programme helps bridge that gap.

*Manaaki Student, MEDSCI
206, 2018*



As a Pasifika student, I am especially aware of his inclusivity and ongoing commitment, he goes out of his way to make me feel like I belong in a system whose values do not align with my own. His relationships with all his students are unusual in that he actively seeks to provide for those in need.

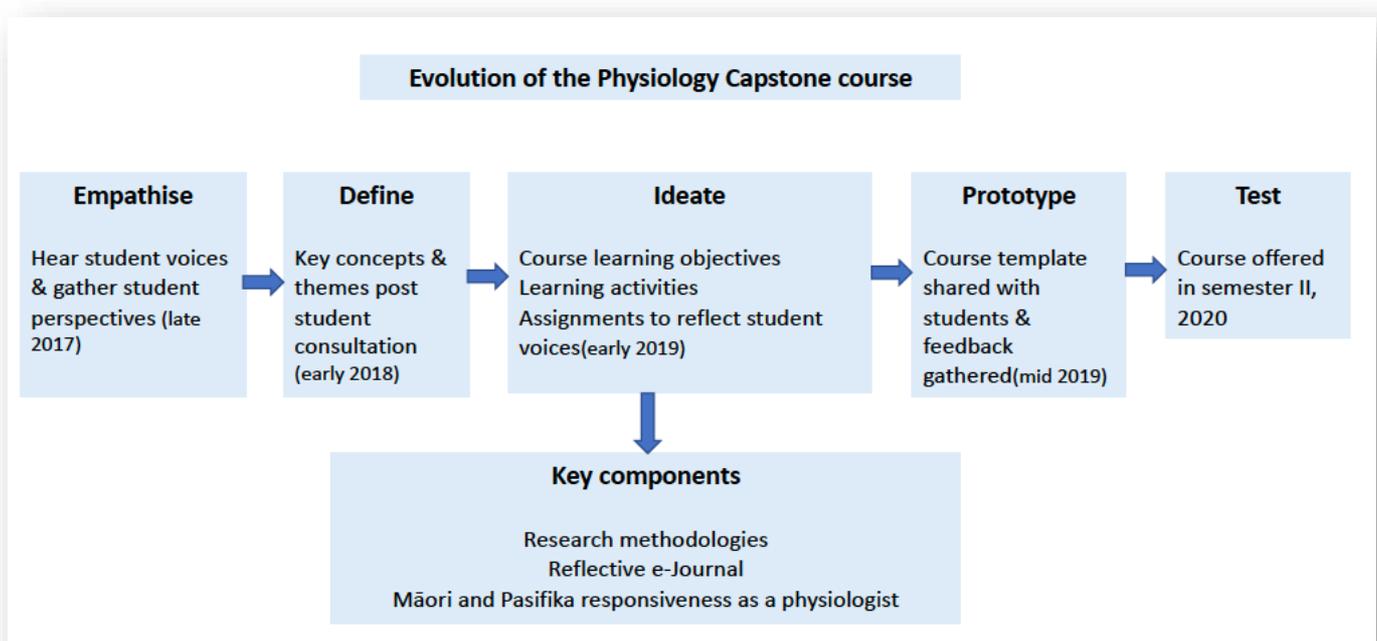
Student, MEDSCI 206, 2018

Student-centred learning and co-designing with peers

I use Whanaungatanga (connection with others) to develop my teaching, drawing heavily on feedback from students and peers.

I have been fortunate to receive wonderful student feedback, inspiring and strengthening my learning initiatives within and beyond the classroom. Student concerns are at the centre of my reflections on teaching, and when prototyping initiatives I actively seek their advice. I have used design thinking, an innovative and human-centred process that helps generate user-focused experiences (Scheer & Plattner, 2011). Design thinking has allowed me to effectively adopt constructive alignment of learning activities, assessment and outcomes. Constructive alignment refers to the congruence between clearly established intended learning outcomes, the actual execution of learning activities, and appropriate assessment tasks (Biggs, 1999a). I strive for constructive alignment as I plan assessments and learning opportunities in lectures, practical laboratories and small-group teaching.

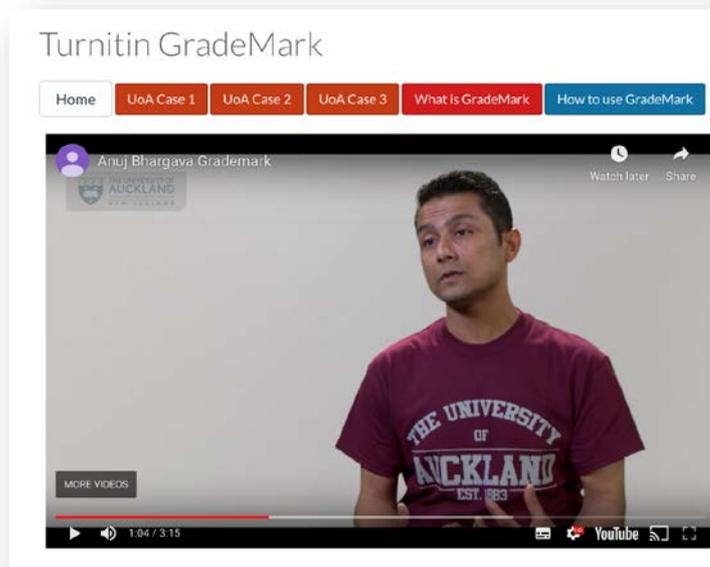
Capstone courses are significant assessed learning experiences within a qualification. They provide students with opportunities to integrate and apply prior learning and support their transition to professional life or further study. In 2018 I was tasked with being the departmental capstone champion and developing a capstone course for BSc students majoring in physiology. I used input from past and current students about what was needed to address key areas in physiology such as experimental design and research proposals. I also shared ideas with fellow capstone champions within the faculty. The course is being offered for the first time in 2020.



Anuj has been incredibly active ... ensuring clear alignment between learning objectives, resources, labs, lectures and marking rubrics ... students and staff know what is expected from objectives to assessment (a lot of his time is spent educating the educators too) leading to considerable improvement in the educational delivery by staff and better outcomes by our students.

Professor Laura Bennet, HoD Physiology

In 2007, in response to student need for more consistent, clear feedback, I pioneered the use of Turnitin in the Faculty. Rather than simply deploy its original plagiarism-checking function, I used it to mark assignments electronically, develop rubrics for marking consistency, moderate assignments and provide meaningful feedback.



I have been very impressed by your creativity and originality in adapting new teaching approaches to the needs of your students. I find what you are doing to be both exciting and innovative. What has especially impressed me is the responses of your students. I witnessed these first-hand in the workshop late last year where a student group commented freely on their experiences using new technologies and material that you have introduced.

Professor Emeritus A.D.C. Macknight, FRSNZ, 2019

Empowering students beyond the classroom

I have led the development of several initiatives designed to whakamana (empower) students, and extend their learning and development beyond the classroom.

Students helping students: Peer tutoring in MEDSCI 205

Students used to regard our large second-year course, MEDSCI 205, as 'difficult'. In 2007, influenced by the pioneering work of Marton and Säljö (1976) on students' conceptions of learning, I incorporated a voluntary peer-tutoring programme. This supplementary instruction supports all students and fosters 'deep', collaborative learning (Hurley, Jacobs & Gilbert, 2006). Students take responsibility for their own learning and that of their peers, working in small groups facilitated by students who did well in the course the previous year. The programme has been immensely well received by peer tutors and tutees alike. The popularity of the MEDSCI 205 scheme has created a pool of students keen to tutor the following year. I have investigated some of the effects of peer tutoring and presented the findings at an international conference in Spain. I plan to continue studying the long-term impact of peer tutoring.

Anuj helped with my academic development mentoring provided me with a strong background that has allowed me to continue tutoring throughout the past few years and aided me to explain complex concepts to my peers and the patients I am now seeing everyday in the hospital.

Student, MEDSCI 311, 2015

Self-help resources to bolster student performance

MBChB 221, in the medical degree programme, aims to integrate knowledge from many sources and prepare students for clinical work. I started teaching the course in 2006. Student feedback and my own observations made it apparent that lecture and laboratory sessions had become disparate learning activities lacking clinical coherence. Students struggled with the demands of three-hour clinical laboratory sessions. There were 300 students in the course. Too much time was spent trouble-shooting the equipment and, despite good staff-to-student ratios, students struggled to relate their laboratory experiences to their theoretical learning.

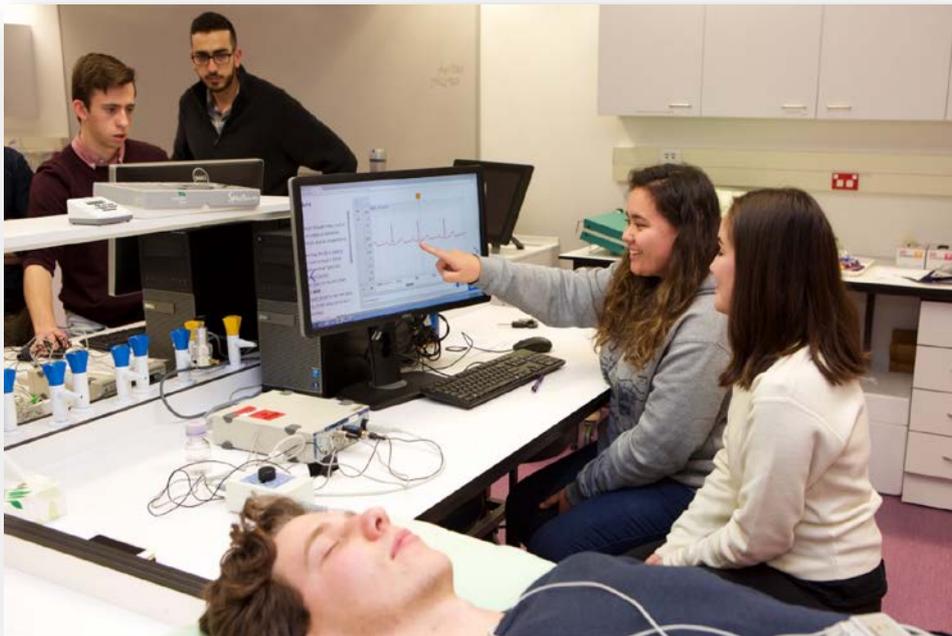
I wanted to shift from a teacher-centred approach to a student-centred learning environment. To bolster student autonomy and build their powers of reflection and research, I complemented traditional class-time with online materials. By employing this blended

approach, I hoped to enable students to acquire deeper subject knowledge and greater intellectual independence.

Using “KuraCloud”, an on-line platform, I made previews of the laboratory session available. Videos showed students the laboratory setup before class. The instructions were made clearer, shorter and embedded within the programme. I also took the opportunity to embed clinical context so students could immediately see the session’s value. A survey of participants showed an overwhelmingly positive response.

KuraCloud keeps the labs from becoming tedious, avoiding time-consuming plotting and calculations. This makes it easier to identify the important concepts we are learning in the lab, rather than getting bogged down in detail. This is very valuable, particularly for med students who have less future-focus on processing data (compared with other science students) and more with applying concepts.

Student, MBCHB 221, 2017



These blended learning or hybrid strategies are effective, and students clearly appreciate them.... Anuj’s strategies encourage students to be part of the learning strategy and to take ownership of their learning. It builds confidence around core knowledge and then allows for exploration to build depth. I have personally seen these approaches flourish in my own courses where we are seeing some frankly stellar academic pieces of work and quiet confidence in those who have traditionally struggled.

Professor Laura Bennet, HoD, Physiology, 2019

Back to Respiratory and Cardiovascular

Cardiovascular

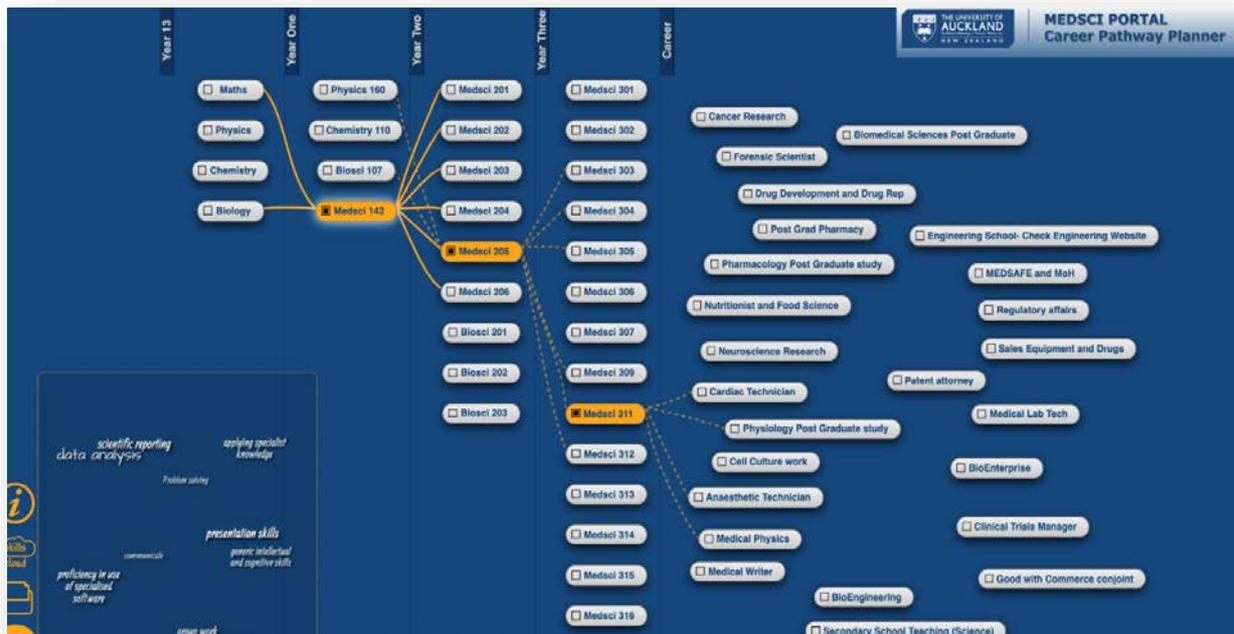
CVS Clinical Problems I: ECG - Rate & Rhythm	ECG and PCG - Pre-Lab	ECG and PCG - Lab	CVS Clinical Problems II: ECG - Ventricles
Human Dive Reflex - Pre Lab	Human Dive Reflex - Lab	CVS Clinical Problems III: Ventricular Function	Peripheral Pulses and Blood Pressure

Anuj has done an exceptional job integrating technology into the physiology labs in a very user-friendly manner.... we will continue to develop the platform: we are already looking at moving the "Chest Pain Integrated Learning Activity" to KuraCloud. Anuj's success in providing a very positive learning experience for the students should continue to pay off for many years.

Dr. Carolyn Barrett, Senior Lecturer, Physiology

Degree-planning advice and career connections

As the undergraduate student advisor for the Department of Physiology, I guide students through the intricacies of degree programmes and career options. The [career pathways portal](#) I developed with colleagues at IT services, gives students an opportunity to see a range of career options, identify those of interest, and work backwards to how to achieve their goals. Important information about pre-requisite courses, skills, graduate profile attributes and assessment formats is integrated into the tool.



To foster a supportive community of learners, I worked with students to establish the Student Association for the Medical Sciences (SAMS). This student organisation has taken on a life of its own and is now self-sustaining. Impressively, SAMS has helped me organise the career events and various student mental well-being initiatives.

Anuj's positive relationships come from embedding manaakitanga into his teaching. He demonstrates this commitment with his excellent memory of student names and passions as well as his focus on student wellbeing.

Student, MEDSCI 311, 2017

Since 2009, I have designed and organised School of Medical Sciences professional development events, careers expos and networking events to connect BSc students with industry contacts. I have tailored them to provide meaningful engagement with prospective employers. The events are a great way for organisations to raise their profile and promote graduate recruitment programmes. They usually have a specific theme reflecting student

interests, with an invited guest from either academia or industry, followed by expo-style interaction with potential employers. This helps students visualise their career pathways.



I'd just like to thank you for organising the SMS Careers Event tonight at Grafton. I found it extremely insightful, especially as a student who is currently still exploring options for next year.

SMS Careers event attendee, 2014

Innovating & leading in teaching & learning

Anuj introduced a series of teaching innovations to promote increased engagement and interaction with students not only in the classroom, but by providing career and pastoral support.... [T]he Butland Award for Excellence in Teaching Innovation [recognised] ... his contributions promulgating pedagogically sound teaching initiatives and ... mentoring others across the Faculty and University.

Professor Paul Donaldson, HoS, School of Medical Sciences, 2019

My job is to empower students and help them to realise their potential. To do this, I must work alongside my colleagues, as part of a team, to provide a holistic and inclusive experience. Collaboration is central to creating new initiatives. Working with colleagues at all levels, inspiring and empowering them to refine their teaching strategies, has been very rewarding. Together we inspire students to look beyond graduation to their future careers.

Innovating in teaching and learning

Partnering with highly specialised colleagues within the University has resulted in some of my best teaching innovations. In collaboration with the Libraries and Learning Services (LLS) Student Learning Team I developed a suite of self-help online tools that students can access prior to formal learning contact. We aimed to prepare students for careers in science by enhancing their communication skills. Our collaboration has resulted in several very useful resources including a lab-report writing guide and a literature-review web tool.

Lab report writing 101

THE UNIVERSITY OF AUCKLAND
SCHOOL OF MEDICAL SCIENCES

Home
Writing Reports: overview
Report Structure
Title
Introduction
Methods
Results
Discussion
Conclusions
References
Quiz
Final Hints
Feedback
Acknowledgements

Introduction

Purpose of this site:
Help you gain proficiency with writing Practical Laboratory Reports.

Learning Objectives

- Define the various sections of a scientific report.
- Identify what individual report sections require.
- Develop report writing skills examining the examples provided.
- Complete all sections of the website to further consolidate report writing skills.

Tips for writing high quality reports

Rachel has a PhD in Pharmacology from the University of Auckland specialising in neuropharmacology. She is the coordinator for MEDSCI 307 Neuroscience: Neuropharmacology and MEDSCI 306 Principles of Toxicology. Rachel has a decade of experience teaching undergraduate students in laboratories and lectures and estimates she has marked more than 6000 lab reports to date!

[Writing Reports: overview](#)

In 2009, we developed an online tool to enable students to write better lab reports. Its active, student-centred approach facilitates ‘any-time, any-place’ learning. The tool is user-friendly and accessible, makes effective and efficient use of tutors’ time. Information, videos and quizzes guide students’ report writing, integrating academic literacy and helping with career preparation and/or further study. The tool received international recognition at the 2015 eLearning conference in Singapore. Most importantly it has resulted in better outcomes for ‘at risk’ students. A modified version is being used in the University’s faculties of Engineering and Science.

While the Centre for Learning and Research in Higher Education (CLear) Fellow in 2017, I addressed the theme of “Writing, Writing, Everywhere” through the development of a literature-review writing tool. This guides Stage III and returning postgraduate students through the process of writing a literature review. My suite of learning resources is now part of the LLS website.

THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

Researching and writing a literature review
Biomedical Skills

Site Map

Purpose of this site:
Help you gain proficiency with researching and writing a literature review.

Where do I start?

Finding, organising and evaluating

Critical reading and note-taking

Writing

Referencing

My tool provides staff and students with an accessible scaffold for developing scientific writing skills.

Anuj has embraced new opportunities ... to develop a suite of learning resources for biomedical students ... integrating the report-writing resource, as well as, resources around literature reviews, presentation and laboratory skills, and providing biomedical students with ‘one-stop shop’ learning resources.

Hester Mountifield, Assistant Director LLS, 2017

Empowering colleagues and early career teachers

Our students do a great deal of active learning in laboratory settings, so laboratory demonstrators need to be proficient. In 2008 I developed a demonstrators' training programme. Typically, demonstrators are post-graduate students. The training programme includes video clips that communicate key messages about professionalism, common teaching scenarios and key skills for lab demonstrators. This has boosted the postgraduate students' teaching skills and greatly enhanced the undergraduate learning environment. Mentoring the demonstrators is an ongoing pleasure.

The training is invaluable.... preparing us for common misconceptions, and emphasising how we can enable students Thanks to the regular demonstrator meetings I have become more and more comfortable with a problem-solving approach. Anuj provides regular constructive feedback ... [in] a goal-oriented framework ... and allows us to grow as whanau ourselves.

Physiology demonstrator, 2019

I have contributed to the Business School's *Learn, Do, Share* and other university-wide teaching seminars. I have also been a long-term contributor to CLear's Learning Catalyst induction workshops. My expertise and experience in teaching has benefitted staff beyond FMHS.

As part of my ongoing commitment to benchmark our teaching practice against similar academic institutions, I took the initiative to invite Prof. Dee Silverthorn (Austin Medical School, Texas) and Dr Sharon Herkes (University of Sydney) to create contextualised teaching development opportunities for staff. This gave us opportunity to co-operate on design-thinking implementation and cloud-based learning within our respective teaching spaces.

More and more people in our institution are becoming interested in Anuj's active teaching approaches, having seen their positive impact in his classroom.

Teri Ko, PTF, FMHS, 2020

I look forward to our continued international collaborations and your inaugural techfest. This will be a great support for technical staff using LT across Australia and New Zealand.

Dr. Sharon Herkes, University of Sydney

Formally, I empower my peers through the FMHS Teaching and Learning Community (TLC) professional development sessions. The TLC aims to foster collaboration – physical and digital – between teachers. We explore teaching problems and possibilities, exchange ideas about all aspects of learning and teaching and create new knowledge and practice in the faculty in a friendly and supportive environment. The TLC aims to meet twice a month and has 153 members. I have been actively involved in the creation and development of this community of practice. I am also involved in the ongoing evaluation of teaching experiences, perspectives, impact and effectiveness by members of this community of practice.



Anuj, you have had huge reach and have influenced countless internal and external academic staff, educators, learning designers and students through your University-wide CLear Fellowship initiatives to embed meaningful and purposeful blended tools for learning that encourage deep thinking and engagement rather than surface learning.

Lynne Petersen, Academic Director, Pharmacy Programme, UoA, 2020

Contributing to the scholarship of teaching and learning

Pedagogically sound teaching is evidence based. I conduct research into the effectiveness of all my teaching initiatives and share these outcomes with the academic community in scholarly venues. My recent research outputs include peer-reviewed publications on deep learning, blended learning, e-learning and the creation of communities of practice.

Table 1: Research outputs

Bhargava, A., & Petersen, M. L. (2019). *Creating spaces for deeper learning through blended approaches to lab-based physiology learning via kuraCloud.*

HERDSA 2019, Auckland, New Zealand, 03 Jul 2019 Auckland.

Bhargava, A., Tsai, A., Han, C., Sim, H., Aspden, T., Carrucan-Wood, L., & Honey, M. (2019). Ako: Fostering a Teaching and Learning Community of teachers as learners. In *SoTEL: Scholarship of Technology Enhanced Learning 2019*. Auckland University of Technology, Auckland City, New Zealand.

Honey, M., Aspden, T., **Bhargava, A.**, Carrucan-Wood, L., Tsai, A., & Sim, J. (2019). Creating, sustaining and realising the value of a faculty-wide community of teaching practice. *International Journal of Innovative Research in Medical Science*, 4(3), 229-234. doi:[10.23958/ijirms/vol04-i03/606](https://doi.org/10.23958/ijirms/vol04-i03/606)

Acosta, M. L., Sisley, A., Ross, J., Brailsford, I., **Bhargava, A.**, Jacobs, R., & Anstice, N. (2018). Student acceptance of e-learning methods in the laboratory class in Optometry. *PloS one*, 13(12), e0209004. doi:[10.1371/journal.pone.0209004](https://doi.org/10.1371/journal.pone.0209004)

Bhargava, A., Eberhard, A., & Wang, L. (2017). Development of Educational Technology hub at the University of Auckland. In *THETA 2017*. Auckland.

Bhargava, A., Brailsford, I., & Ward, M.(2014). Peer Tutoring In A 'Difficult' Physiology Course: Who Is Helping Who?. In *ICERI2014, Seville, Spain, 17-19th November, 2014*



Conclusion

He waka eke noa (We are all in this together)

Over the last fourteen years I have embraced the challenges of stimulating enthusiasm in students for physiology, and identifying pedagogical and social strategies to sustain students' curiosity in the subject. I have focussed on holistic learning initiatives that prepare students for life-long learning.

Anuj is so approachable and engaging ... I am so impressed ... he knew everyone's name.... You can tell that he genuinely cares and is there to help...

Student, MEDSCI 205, 2019

Looking forward to the next decade of teaching challenges I hope to learn more from my students, venture further into blended learning environments and learn more from my peers. I want to enable my peers in their career development and nurture the community of practice established within my faculty and beyond. I see myself working with my peers to establish an outreach programme to encourage rangatahi from all over New Zealand to engage with physiology and encourage potential future biomedical researchers. Student voices are my inspiration for developing Auaha (creative approaches) and for creating Wānanga (creative spaces) within my teaching domain.



I just wanted to personally thank you for honestly being UoA's employee of the century. It baffles everyone how you're so willing to help, no matter the time of day or the pedantic nature of inquiry, going out of your way to make sure that everyone's questions are answered, and making sure that we're doing well in general.

Student, MEDSCI 206, 2019

References

1. Mylopoulos M, Woods N. Preparing medical students for future learning using basic science instruction. *Med Educ* 48: 667–673, 2014.
2. Scheer, A., & Plattner, H. (2011). Transforming Constructivist Learning into Action: Design Thinking in education. *Design and Technology Education: An International Journal*, 17(3), 8–19.
3. Biggs, J.B. (1999a). Teaching for quality learning at university. Buckingham, UK: Open University Press.
4. Hurley, M., Jacobs G and Gilbert M. (2006). The Basic SI Model. In M.E Stone and G. Jacobs (eds.), *Supplemental instruction: New visions for empowering student learning* (11-22). San Francisco: Wiley.
5. Marton, F. and Säljö, R. (1976). On qualitative differences in learning: outcome and process. *British Journal of Educational Psychology*, 46, 4-11.



