



TENZ TECHNOLOGY
EDUCATION
NEW ZEALAND

EXPANDING POSSIBILITIES

CONFERENCE
PROGRAMME
2023



A Conference for
Technology Educators

Ōtautahi - Christchurch
2nd - 4th October 2023

tenz.org.nz

WELCOME

TENZ Chair

Tēnā koutou and welcome to the 2023 TENZ Conference in Ōtautahi - Christchurch, taking place from the 2nd to the 4th of October. In the spirit of "Expanding Possibilities," we come together to explore the boundless potential of technology education in Aotearoa New Zealand.

Our conference, spanning from early childhood education to tertiary levels, represents our vision of inclusivity, innovation, and excellence. It is a testament to the dedication of educators across Aotearoa New Zealand who understand that technology is not just a tool but a gateway to limitless horizons.

I am thrilled to introduce our esteemed keynote speakers: Byron Webb from Victoria University, Wellington; Arpo Deer from the University of Canterbury; and Ian Hayes from Ao Tawhiti. Additionally, our wide variety of speakers, such as special mentions go to Lynne Harata Te-Aika. Their insights and expertise will undoubtedly inspire us to think bigger, challenge the status quo, and embark on new educational journeys.

*Whaowhia te kete mātauranga.
Fill your basket of knowledge.*

I encourage you all to engage, to collaborate, and to explore the opportunities that lie ahead. Together, we have the power to shape the future of technology education in Aotearoa New Zealand. Thank you for being a part of this remarkable journey.

Hamish Johnston

TE AROHA

**Te aroha
Te whakapono
Me te rangimarie
Tātou tātou e**

SUNDAY 1ST OCTOBER 2023

4:30 pm - 5:30 pm

Registration at Ao Tawhiti

4:30 pm - 7:30 pm

Pre-Drinks at Craft Embassy, make your way there after registering and join us for a complimentary drink and nibbles.

DAY ONE: CONNECTING MONDAY 2ND OCTOBER 2023

9:00	Mihi Whakatau - Whakawhanaungatanga Keynote (these will run concurrently on each level of Ao Tawhiti)								
11:00 - 11:45	Ao Tawhiti, learning in this space <i>Ian Hayes</i> ROOM 2.4			The potential that lies at the intersection of Māori culture and technology <i>Arpo Deer</i> ROOM 3.4			Approaching contemporary Māori sound culture in education <i>Byron Webb</i> ROOM 4.4		
11:55 - 12:35	Ao Tawhiti, learning in this space <i>Ian Hayes</i> ROOM 2.4			The potential that lies at the intersection of Māori culture and technology <i>Arpo Deer</i> ROOM 3.4			Approaching contemporary Māori sound culture in education <i>Byron Webb</i> ROOM 4.4		
12:35 - 1:25	Lunch ON LEVEL 1								
1:30 - 2:15	Interactive Workshop <i>Motu Samaeli</i> Design Thinking - activating learning, divergent thinking and questioning assumptions ROOM 2.6	MoE Workshop <i>Catherine Frost</i> Te Mātaiaho / The Refreshed New Zealand Curriculum ROOM 3.6	Exemplary Workshop <i>Rebecca Hembrow</i> Making Authentic Local Curriculum projects in Technology ROOM 2.2	MoE Workshop <i>Pip Osborne</i> Mātauranga Māori in Technology ROOM 3.3	Interactive Workshop <i>Marcus Makerspace</i> Lightburn for Lasers - software for driving laser cutters (Advanced) ROOM 1.7	Interactive Workshop <i>Lesley Ottey</i> Eco educate Fluffy stuff refurbished OpShop ROOM 2.3		1:30 - 2:00	Research Paper <i>Kerry Lee</i> Acknowledging the elephant in the room: Supporting teachers and learners with digital addictions ROOM 4.6
2:20 - 3:00		(E/P/I/S/T) (Generic)	Exemplary Workshop <i>Julie McMahon</i> Crafting Code: Programming and Computational Thinking Pedagogies ROOM 3.5	MoE Workshop <i>Marg McLeod</i> Connected Ako: Digital and Data for Learning 45 mins ROOM 3.2					2:00
								2:30	Research Paper <i>Richard Edwards</i> Starting points - initial teacher education students' perceptions of technology education ROOM 4.4
	(I/S) (DVC)	(S) (Generic)	(P/I/S) (Generic)		(P/I/S) (Digital)	(E/P/I/S/T) (Soft)	(E/P/I/S/T) (Generic)		(P/I/S/T) (Generic)

DAY ONE: CONNECTING MONDAY 2ND OCTOBER 2023

3:00 - 3:25	Afternoon Tea ON LEVELS 2, 3 AND 4								
3:30 - 4:15	Interactive Workshop <i>Jessica Cathro</i> Using Electronics to support the Local History Curriculum ROOM 2.8	Interactive Workshop <i>Julie McMahon</i> Teaching Cyber Security in your classroom ROOM 3.3	Exemplary Workshop <i>Daniel Hāpuku</i> Mātauranga Māori: Let's Understand, Know, and Do ROOM 3.6	MoE Workshop <i>Pip Osborne and Stephanie O'Sullivan</i> UDL ROOM 2.1	MoE workshop <i>Lisa Mackay</i> Effective Integration of Foundational Literacy Practices into Technology Programmes ROOM 2.3	Interactive Workshop <i>Alex Bevin</i> Onshape CAD Training for Technology Teachers ROOM 4.2	Interactive Workshop <i>Sonia Lucchese BetSo</i> How to weave harakeke into your programme ROOM 3.2	1:30 - 2:00	Research Paper <i>Richard Edwards</i> Primary teachers understandings of the STEM education they are offering ROOM 4.6
		(P/I/S) (Soft)						(P/I/S/T) (Generic)	
4:20 - 5:00		MoE Workshop <i>Catherine Frost</i> Te Mātaiaho / The Refreshed New Zealand Curriculum ROOM 3.5						2:00	Research Paper <i>Ryo Kimura</i> Development of a framework for a Japanese AI curriculum to build AI literacy in junior high school ROOM 4.5
		(I/S) (Generic)						(E/P/I/S/T) (Generic)	(I,S) (Generic)
								2:30	Research Paper <i>Wendy Fox-Turnbull</i> Asking Questioning in Technology Education ROOM 4.4
		(I/S) (Generic)	(E/P/I/S/T) (Generic)						(P) (Generic)
8:00	He Puna Taimoana - New Brighton hot pools This is a private session for TENZ conference attendees and their whānau. Cost per person \$6.50. PICK UP POINTS TO BE ARRANGED								

CONFERENCE COMMITTEE

Tracy Henderson
Conference Convenor

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DAY TWO: UPSKILLING


TUESDAY 3RD OCTOBER 2023

Day two focuses on upskilling ourselves and continuing to connect with each other.

8:45	Welcome to day two - Upskilling								
9:00	Minister of Education								
9:15 -10:00	Sharing the experiences of growing Maukatere technology centre <i>Chami Hutterd</i> ROOM 2.4			Design thinking and Mātauranga Māori <i>Arpo Deer</i> ROOM 3.4			Researchers panel session <i>Hosted by Kerry Lee</i> ROOM 4.4		
9:15 -10:00	Sharing the experiences of growing Maukatere technology centre <i>Chami Hutterd</i> ROOM 2.4			Design thinking and Mātauranga Māori <i>Arpo Deer</i> ROOM 3.4					
10:50 -11:20	Morning Tea ON LEVELS 2, 3 AND 4								
11:25 - 12:10	Interactive Workshop <i>Nan</i> <i>Walden-Moeung - Kakahuria ki te Atawhai</i> Presentation on how construction of contemporary and traditional Korowai and Kakahu raises Maori achievement in high school. Discussion around the evolution of Contemporary Korowai and its use in society, how traditional techniques and Materials can be used, and combined with more contemporary techniques and materials to create a special garment that takes a student on an identity hikoi. ROOM 2.6	MoE Workshop <i>Steph</i> MoE NCEA Change Programme Update ROOM 3.3	Exemplary <i>Claire Wigley</i> The Superstar game of Design Thinking and the 21st Century learning environment. ROOM 3.6	Interactive Workshop <i>Ben Egerton</i> Embedding Digital Technology Learning in Online Science Projects ROOM 3.2	11:00AM Field Trip <i>Asian Cooking School</i> Min 10 people, Max 20 people. \$150.00 includes food and drinks (4 dishes) Note - this is a 4 hour workshop. OFFSITE, MEET ON LEVEL 1 AT 10:20AM	Interactive Workshop <i>Brenda Brook</i> Embellish it - applying textiles design with panache! Participants will learn how to jazz-up a range of household items on offer using existing craft supplies and basic skills in order to create beautiful and/or useful objects. This hands-on workshop is useful to include in your end-of-term kete, relief lesson ideas and for days when everyone (including the teacher) needs some fresh inspiration. Possible target audience: years 7-10 but senior students and students requiring learning support would enjoy these easy-peasy and fun activities as well. ROOM 2.3	Interactive Workshop <i>Lisse & Sarah</i> Sustainable Lunches Discussing through the sustainable lunches unit and making beeswax wraps ROOM 2.1	11:25	Research Paper <i>Andrew Doyle</i> Teachers' Conceptions of the Nature of Technology in Educational Research ROOM 4.6 (P/I/S/T) (Generic)
12:10 - 12:55								MoE Workshop <i>Joseph Houghton</i> Opportunities for students - exploring technology pathways and emerging industries ROOM 3.5	11:55
	(P/I) (Materials)	(I/S) (Hard/Digital)						12:25	Research Paper <i>Kimihito Takena</i> The Actual State of Creative Attitudes in Engineering Learning through Text Mining Analysis ROOM 4.4 (S) (Generic)

DAY TWO: UPSKILLING TUESDAY 3RD OCTOBER 2023

Day two focuses on upskilling ourselves and continuing to connect with each other.

12:55 - 1:30 Lunch ON LEVEL 1									
1:35	MoE Workshop <i>Pip and Steph</i> Literacy and Numeracy in Technology ROOM 2.2	Interactive Workshop <i>Kate Rhodes</i> CT in the tech curriculum for Primary ROOM 3.3	Interactive Workshop <i>Jenny Kempster</i> #GIRLPOWER Leadership & STEM: Fostering Inclusive STEM Learning 90 MINS ROOM 3.6	Double Interactive Workshop <i>Ceri de Boo</i> Waste not, want not Max 10 people 1:30PM - 5:00PM 3.5 HOURS ROOM 2.3	Field Trip <i>Asian Cooking School</i> (continued)	Field Trip <i>UC School of Product Design</i> This field trip will be a tour of the campus to see in action what their students are preparing for their final assessment tasks. Max 10 people per tour. OFFSITE, MEET ON LEVEL 1 AT 1:00PM	Field Trip <i>Lynne Harata Te-Aika Matapopore projects hikoi</i> Join Whaea Lynne on a walk through the city centre of the rebuild anchor projects. Max 18 - 20 people per session  OFFSITE, MEET ON LEVEL 1 AT 1:25PM	1:35	Research Paper <i>Kimihito Takena</i> Develop of video teaching materials and self-monitoring system to support skill acquisition ROOM 4.6 (P/I) (Generic)
								2:05	Research Paper <i>Lynley Stringer</i> The impact of Professional Learning and Development on teachers' Digital Technologies self-efficacy ROOM 4.5 (P/I) (Digital)
								2:35	Research Paper <i>Hung-Chang Lin</i> Implementation and Core Competence Evaluation of Manufacturing Technology Capstone Course of School ROOM 4.4 (T) (Hard)
		(P/I) (Digital)			(I/S) (Food)	(I/S/T) (Soft materials)	(E/P/I/S/T) (Generic)		

DAY TWO: UPSKILLING TUESDAY 3RD OCTOBER 2023

Day two focuses on upskilling ourselves and continuing to connect with each other.

3:05	Afternoon Tea ON LEVELS 2, 3 AND 4					
3:30 - 5:00	Interactive Workshop <i>Julie McMahon</i> <i>Grok learning</i> Design like a boss! ROOM 3.3	Interactive Workshop <i>Jessica Cathro</i> <i>Ministry of Inspiration</i> Using Robocup Jr Theatre to support literacy and numeracy ROOM 2.8	Field Trip <i>UC School of Product Design</i> This field trip will be a tour of the campus to see in action what their students are preparing for their final assessment tasks. Max 10 people per tour. OFFSITE, MEET ON LEVEL 1 AT 1:00PM	Interactive Workshop <i>Lesley Ottey</i> <i>Eco Educate</i> Sort the bag ROOM 2.6	3:30	Research Paper <i>Ruth Lemon</i> Utilising kaiako artefacts to teach curriculum integration ROOM 4.6
	(P/I/S/T) (Generic)					
	4:00 - 4:45	Exemplary Practice <i>Carl Burr</i> Implementing strategies to increase Student Assessment Capability in NZ Technology Education ROOM 4.5				
(E/P) (Generic/Digital)					4:30	Research Paper <i>Takekuni Yamaoka</i> Development of STEM Electrical Teaching Materials Utilizing the PPDAC Cycle ROOM 4.4
(P/I) (Generic)		(I/S) (Digital)	(I/S/T) (Hard/Digital)	(E,P, I S, T) (Materials)	(S) (Digital)	
6:30	Awards dinner AT THE DISTINCTION HOTEL					



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MARCUS LUND
Makerspace NZ Director & “Chief Do-er”

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Sustainable Design

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DAY THREE: IMPLEMENTING WEDNESDAY 4TH OCTOBER 2023

Day three is all about consolidation, the workshops we are confirming will guide you with your planning and assessment. There will also be time to connect with presenters to ask questions as you consider how you will take what you have learnt and bring it into your classroom programme.

8:45	Housekeeping							
9:00 - 9:45	Exemplary Workshop <i>Craig Perkins</i> Technology project diversity ROOM 2.5	Interactive Workshop <i>Melinda Dixon</i> Planning your next STEM unit with a focus on integrating Computational Thinking ROOM 3.3	Interactive Workshop <i>John Robinson</i> Robotics modelling using Tinkercad, Arduino and H bridges ROOM 2.8	Exemplary Workshop <i>Tanya Utting</i> The myth of “those who can’t do, teach!” ROOM 2.2	Exemplary Workshop <i>Carl Burr</i> Improving written evidence used for assessment purposes within NZ Tech Education ROOM 3.2	Interactive Workshop <i>Ceri de Boo</i> Programme Planning – connect and collaborate. Max 10 ROOM 3.6	9:00	Research Paper <i>Ben Egerton</i> Developing digital technologies expertise through online citizen science ROOM 4.6
	(S) (Generic)							(P/I) (Digital)
9:50 - 10:35	MoE Workshop <i>Vanessa Jarman</i> How do NCEA changes support innovative cross-curricular course design? ROOM 2.6			Exemplary Workshop <i>Lauren May</i> Cut the Waffle! ROOM 4.2			9:30	Research Paper <i>Aya Motozawa</i> Developing Japanese teachers’ technological literacy through AI use in classrooms ROOM 4.5
								(P/I/S/T) (Digital)
		(E/P/I) (Digital)			(S/T) (Generic)		10:00	ITE lecturers kōrero ROOM 4.4
								(S/T) (Generic)
10:40	Morning Tea ON LEVEL 1							
11:15 - 1:30	Poroporoaki and closing of our sessions at Ao Tawhiti ON LEVEL 1							
1:15 - 2:15	TENZ Biennial General Meeting (Optional) ON LEVEL 2							
3:00	Field Trip <i>Cocktail Master Class (can be Mocktails as well)</i> Date and Time: Wednesday 4th October from 3:00pm to 5:30pm Min number: 6 - Max number of tickets: 25 Cost: \$99.00 OFFSITE, MAKE YOUR OWN WAY THERE							
								



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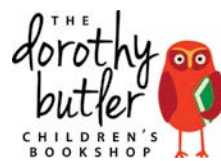
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A special thanks to these organisations for their generous support of our conference and their advocacy for technology education in Aotearoa New Zealand.



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The programme is subject to change and was accurate at 22 September 2023