

PŪHORO STEMM ACADEMY

MID-YEAR VERBAL REPORT

July 2025

Tēnā tātou,

In alignment with our contractual milestones, Pūhoro is providing the following report/memo which is a precursor to the yearly in-person verbal report milestone to be held at the Ministry of Education on Thursday, August 14th in Wellington.

The following report contains the following inclusions and data which at the in-person hui will be further expounded upon. This report shares overviews of the following:

- Pūhoro ākonga achievement and engagement.
- Programme delivery activities.
- Regional growth (Tauranga and Taranaki).
- Trends, challenges, and case studies.

Released under the Official Information Act 1982

Pūhoro Ākonga NCEA Achievement Data 2024

The data presented below highlights Pūhoro's significant impact on student achievement providing the most recent results available from the end of 2024. Building upon data shared with the Ministry of Education in 2023, Pūhoro is continuing to demonstrate impact in academic achievement for ākonga who participate in the programme compared to other Māori ākonga who are not. These data sets also demonstrate how Pūhoro student achievement is benchmarked compared to non-Māori achievement, the result being some outstanding indications of success. In brief, the data provided below provides clear evidence of Pūhoro's significant contribution to Māori achievement and the closing of the achievement equity gap. Finally, the presentation of this data has clear outcomes for the Ministerial Priorities outlined in the Ministry of Education's Strategic Intentions 2025 – 2029 document.

Importantly, all achievement data provided is externally sourced directly from NZQA, as per our current data Memorandum of Understanding with them in place.

The following figures outline Pūhoro achievement and attainment in NCEA which include:

Figure 1: 2024 NCEA Certificate and UE Attainment Rates: This chart compares NCEA and University Entrance attainment rates between national Māori results, Pūhoro ākonga results and other non-Māori national results.

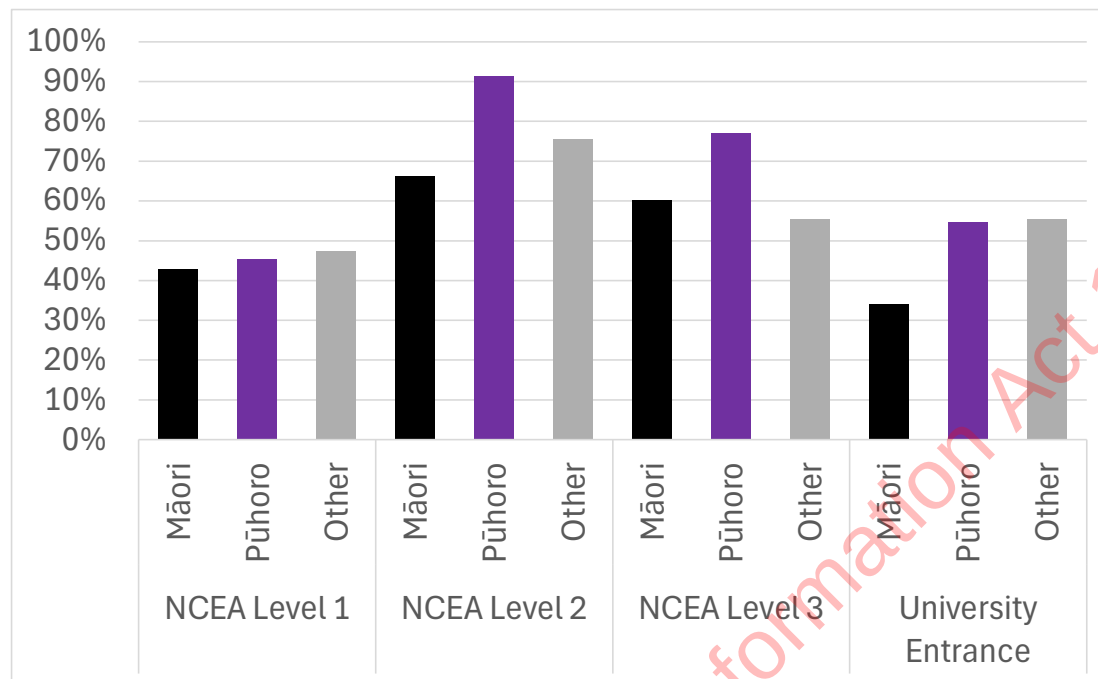
Figure 2: NCEA Certificate and UE Attainment for Pūhoro ākonga 2022-2024 Cohort: This chart gives longitudinal data for a Year 11 cohort which joined the programme in 2022, tracking their achievement and attainment through till Year 13 (across Levels 2 and 3, and University Entrance).

Figure 3: 2024 NCEA STEM Standard Achievement in Pūhoro Partner Schools (Overall): This chart shows overall achievement rates of ākonga Māori in STEM standards in Pūhoro partner schools, compared to achievement rates of Pūhoro ākonga within those same schools.

Figure 4: 2024 NCEA STEM Standard Achievement in Pūhoro Partner Schools by Region: This chart breaks down the achievement rates shown in Figure 3 further by individual region. Achievement rates of Pūhoro ākonga in STEM standards are compared to achievement rates of ākonga Māori within partner schools.

Figures 5 & 6: Cumulative Attainment for Numeracy and Cumulative Attainment for Literacy: These figures show how Pūhoro students progressively attain NCEA Numeracy and Literacy respectively, from Year 11 to Year 13.

Figure 1: 2024 NCEA Certificate and UE Attainment Rates

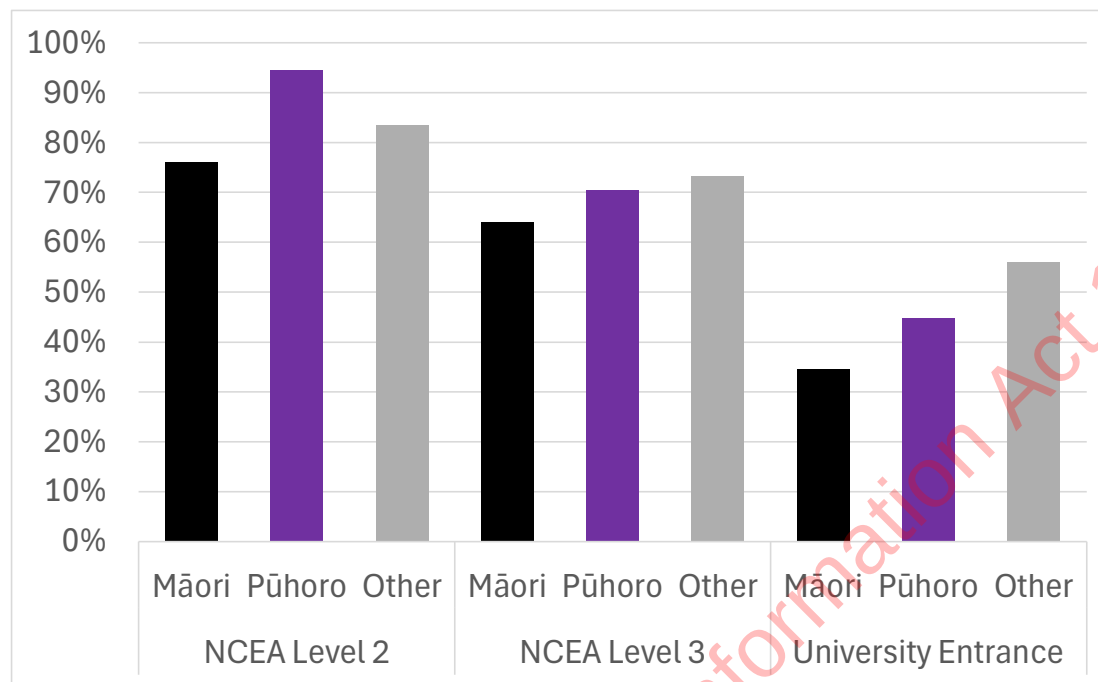


Analysis Points for Figure 1:

- NCEA Certificate attainment across Levels 1-3 showed that Pūhoro ākonga not only achieved a higher pass rate than that of Māori nationally, but exceeded the national achievement pass rates for non-Māori also at Level 2 and Level 3 NCEA attainment. Compared to results presented in 2023, the 2024 results show an increase in NCEA Level 2 attainment, Level 3 attainment and an increase in University Entrance rates for Pūhoro ākonga respectively.
- University Entrance (UE) data showed that Pūhoro students achieved a significantly higher attainment rate than that of Māori nationally, and the Pūhoro UE attainment level is on par with the national non-Māori UE attainment rate (both at 45%).¹
- This figure aligns with the Ministerial priority of **Stronger Learning Support**. Our network of specialist provision for Pūhoro ākonga builds on consistent support throughout the academic year. It builds on a relational approach between Pūhoro ākonga and Kaihautū and STEM tutors we provide in partner schools which through our model of delivery, strengthens learning provision within the classroom and enables Pūhoro ākonga to succeed academically.

¹ Additional data is being obtained from NZQA to identify the reasons University Entrance has not been obtained for students who attained Level 3.

Figure 2: NCEA Certificate and UE Attainment for Pūhoro Ākonga 2022-2024 Cohort

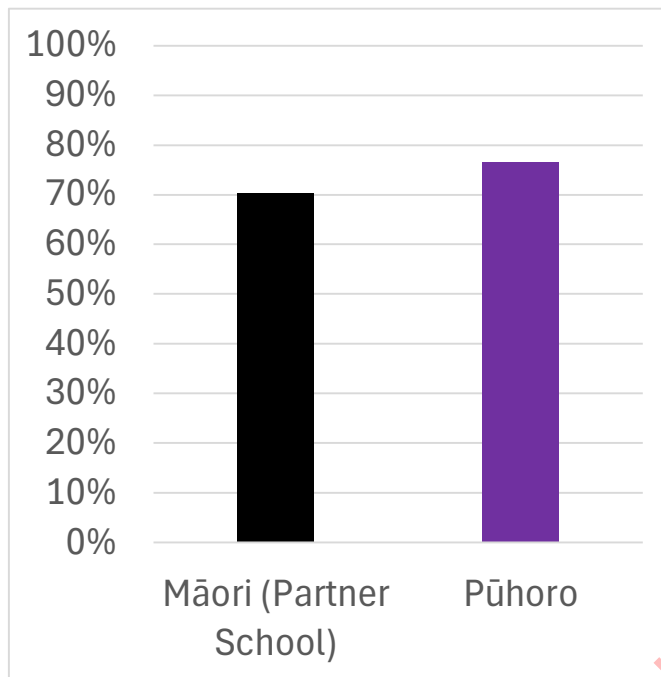


Analysis Points for Figure 2:

- This figure shows NCEA attainment rates across Levels 2 and 3, and University Entrance attainment for our latest Year 13 cohort. Level 1 attainment is excluded as “NZQA is now reporting Level 1 data based on the population of Year 11 students participating in a full Level 1 assessment programme of at least 80 credits at Level 1 or above (this includes credits achieved in prior years), rather than all Year 11 students enrolled in secondary schools.”²
- Our most recent Pūhoro cohort achieved their NCEA Level 2 at a significantly higher rate than both Māori and non-Māori nationally.
- Level 3 and University Entrance attainment rates were also significantly higher for the most recent cohort when compared with Māori in our partner schools.
- Pūhoro ākonga who attain Level 3 are more likely to get University Entrance than Māori in our partner schools. While the percentage of ākonga missing University Entrance drops from 29% to 25% for ākonga on the Pūhoro programme, this presents an opportunity for Pūhoro to further support ākonga to get both University Entrance and Level 3. Additional data has been requested from NZQA to better understand which requirements for University Entrance were not met to identify opportunities for additional tutoring and/or advocacy in subject selection. This approach is further supported by the Ministerial priority of **Greater Use of Data**, to inform critical decision-making around additional foci and support needed for ākonga in the programme.

² <https://www2.nzqa.govt.nz/about-us/news/finalised-2024-ncea-and-university-entrance-attainment-data-now-available/>

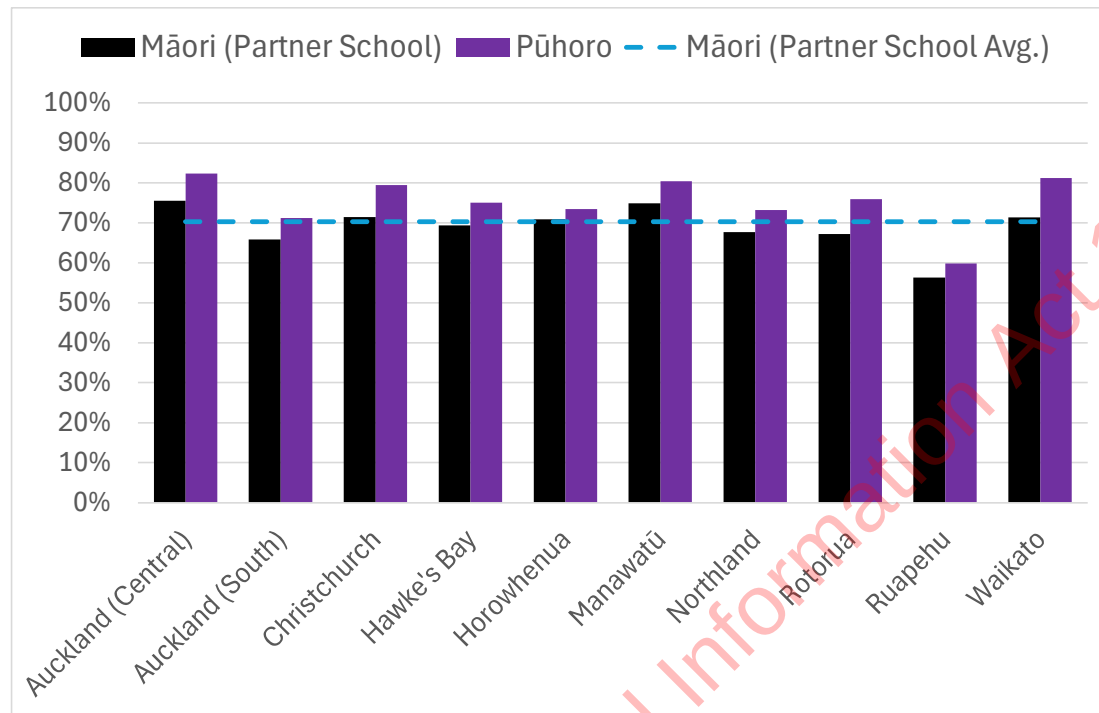
Figure 3: 2024 NCEA STEM Standard Achievement in Pūhoro Partner Schools (Overall)



Analysis Points for Figure 3:

- Pūhoro ākonga achieved NCEA STEM standards at a higher rate than other Māori ākonga within the same schools.
- This increase (6.3%) is up significantly from the 2023 (3.6%) as previously reported.
- Pūhoro is committed not only to increasing both Māori success in STEM subjects but also participation through encouraging ākonga to choose STEM subjects that align with their long-term study and career aspirations.

Figure 4: 2024 NCEA STEM Standard Achievement in Pūhoro Partner Schools by Region



Analysis Points for Figure 4:

- When viewed at an individual regional level, Pūhoro students consistently achieved NCEA STEM standards at a higher rate than other Māori ākonga within the same schools.
- Furthermore, Pūhoro ākonga achieved STEM standards at a rate above the national average for Māori in our partner schools in all regions apart from Ruapehu.
- Our analysis here aligns strongly with the Ministerial Priority of **Greater Use of Data**. Here in Pūhoro our data ensures we are making evidence-based decisions to further uplift and support ākonga in their achievement and success. Pūhoro grounds its model in being able to support ākonga academically and furthermore to enable their pathway in STEMM and extend their line of sight towards STEMM careers in the future.

Figure 5: Cumulative Attainment for Numeracy

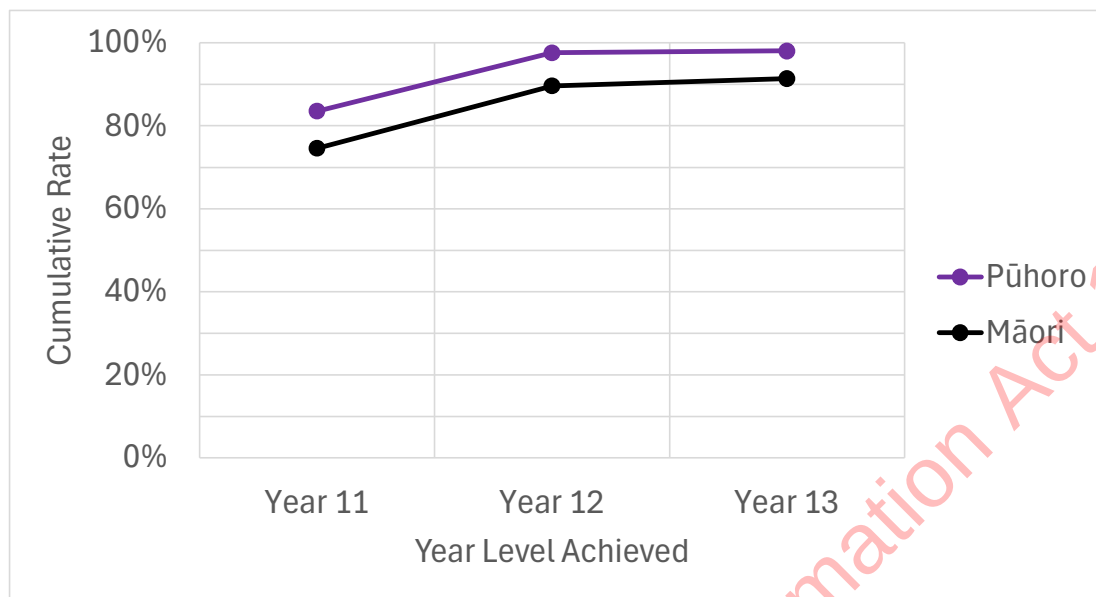
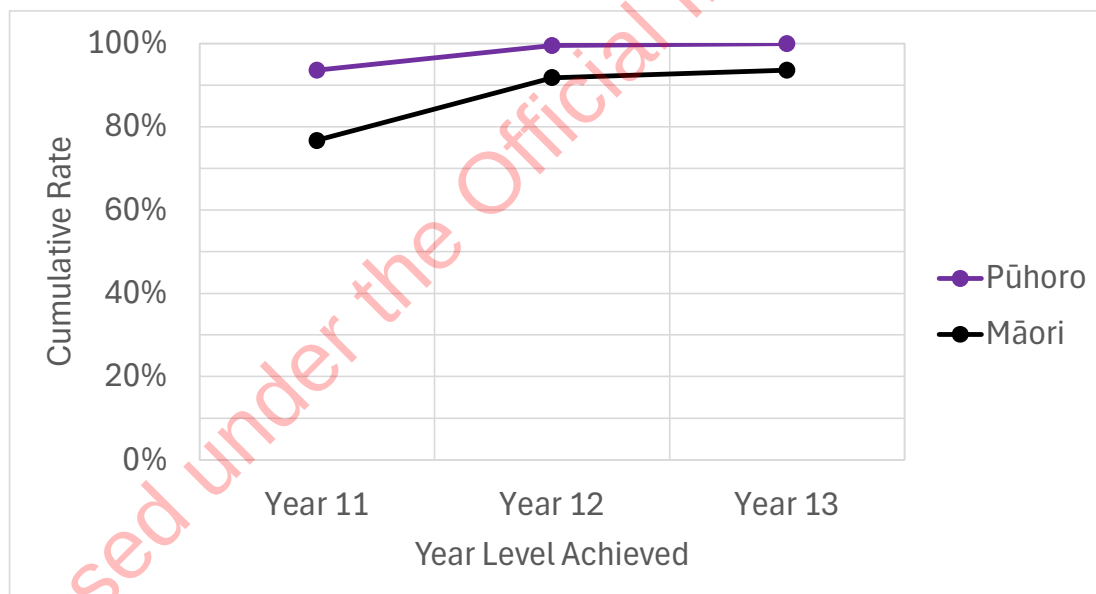


Figure 6: Cumulative Attainment for Literacy



Analysis Points for Figures 5 and 6:

- Pūhoro attainment rates for Numeracy and Literacy far exceed those for Māori nationally.
- This figure aligns with the Ministerial priority of a **Better Approach to literacy and Numeracy**. Pūhoro ākonga who stay in the programme will almost certainly attain Literacy and Numeracy.

Pūhoro STEM Academy Programme Delivery Activities

Pūhoro kaihautū engage weekly with partner schools who are part of the Pūhoro STEM Academy across the country. Our engagement continues to focus on four key aspects of the model:

1. Academic tutoring and support with Pūhoro ākonga STEM standards
2. Mentoring, pastoral support and STEM career exposure
3. Tuakiri (identity) focused in-person regional wānanga which bring together external STEM organisations and Pūhoro ākonga, exposing them to mātauranga Māori and different pathways and opportunities in STEM such as genomics, health sciences, engineering, technology, and mathematics to name a few.
4. Transition support into higher education.

The following schools have partnered with the Pūhoro STEM Academy and benefit from weekly delivery of the Pūhoro programme model, Pūhoro will continue to expand into more schools by the end of 2025. Our current partner schools and associated regions are as follows:

Pūhoro STEM Academy Assigned Regions and Pūhoro STEM Academy Partner Schools	
Region	School
Te Tai Tokerau	Bay of Islands College
	Dargaville High School
	Kamo High School
	Tikipunga High School
	Whangārei Boys' High School
	Whangārei Girls' High School
Tāmaki Herenga Manawa (Central Auckland)	Auckland Girls' Grammar School
	Botany Downs Secondary College
	Onehunga High School
	Pakuranga College
	Selwyn College
	Tāmaki College
	Western Springs College - Ngā Puna o Waiōrea
Tāmaki Herenga Waka (South Auckland)	Alfriston College
	Manurewa High School
	Onewhero Area School
	Papakura High School
	Pukekohe High School
	Rosehill College
	Tangaroa College
	Te Kura Kaupapa Māori o Māngere
	Tuakau College
	Waiuku College
Waikato	Cambridge High School
	Fraser High School
	Hillcrest High School
	Huntly College
	Ngā Taiātea Wharekura
	Ōtorohanga College
	Tai Wānanga

Pūhoro STEMM Academy Assigned Regions and Pūhoro STEMM Academy Partner Schools	
Region	School
	Te Kauwhata College
	Te Kōpuku High
	Te Wharekura o Maniapoto
Rotorua	John Paul College
	Western Heights High School
	Rotorua Girls' High School
	Rotorua Boys' High School
	Rotorua Lakes High School
	Trident High School
Tauranga (February 2025)	Katikati College
	Mount Maunganui College
	Ōtūmoetai College
	Tauranga Girls' College
	Te Puke High School
Taranaki (July 2025)	New Plymouth Boys' High School
	New Plymouth Girls' High School
	Stratford High School
	Te Paepae o Aotea
	Waitara High School
Hawke's Bay	Hastings Boys' High School
	Hastings Girls' High School
	Karamū High School
	Napier Boys' High School
	Napier Girls' High School
	Sacred Heart College Napier
	Taradale High School
	TKKM o Ngāti Kahungunu o Te Wairoa
	TKKM o Te Ara Hou
	Wairoa College
Ruapehu	Ruapehu College
	Taihape Area School
Whanganui	Cullinane College
	Te Kura o Kokohuia
	TKKM o Tūpoho
	Whanganui City College
	Whanganui Girls' College
	Whanganui High School
Manawatū	Awatapu College
	Dannevirke High School
	Feilding High School
	Hato Pāora College
	Mana Tamariki
	Manukura
	Palmerston North Boys' High School
	Palmerston North Girls' High School
	Queen Elizabeth College

Pūhoro STEMM Academy Assigned Regions and Pūhoro STEMM Academy Partner Schools	
Region	School
	St Peter's College
	Tararua College
	Te Kura ā Iwi o Ngāti Kauwhata
	Tū Toa (Tai Wānanga)
Horowhenua	Horowhenua College
	Manawatū College
	Waiopēhu College
Kāpiti	Kāpiti College
	Ōtaki College
Christchurch	Avonside Girls' High School
	Burnside High School
	Cashmere High School
	Christchurch Girls' High School - Te Kura o Hine Waiora
	Kaiapoi High School
	Riccarton High School
	Rolleston College
	Shirley Boys' High School - Ngā Tama o Ōruapaeroa
TOTAL	93 in 2025 (87 in 2024)

Pūhoro Programme Enrolment Numbers

Pūhoro STEMM Academy Programme Phase	December 2024	July 2025
Pūhoro STEMM Academy Secondary Programme	2,015	2,400
Pūhoro STEMM Academy Post Secondary Programme	830	1,290
Total	2,845	3,690

School Engagement Data for 2024/25

Pūhoro STEMM Academy ākonga Engagement Type	Number
Kaihautū sessions – mentoring, tuakiri and 21C skill development	2,487
Academic STEM Standard Tutorials – academic support for NCEA STEM subjects (Levels 1-3)	1,640
STEMM workshops – exposure to STEMM industry partners and career/tertiary pathways through hands-on activities at termly Wānanga	210

Pūhoro has delivered an unprecedented volume of Kaihautū sessions and Academic STEM Standard Tutorials to Pūhoro ākonga within partner schools. We also continue to augment the number of STEMM workshops to expose rangatahi to the many different pathways in STEMM. Our important work is making a difference within schools and for Pūhoro ākonga. The Pūhoro model is positioned to support ākonga, schools, kura kaupapa, and whānau, as well as by extension, regional communities of Māori learners.

Regional Growth – Tauranga and Taranaki

Pūhoro is pleased to advise that as per our agreed regional expansion and growth, we have as planned now expanded to two additional regions in 2025 of Tauranga and Taranaki. This brings our regional expansion to 14 regions in total namely:

1. Te Tai Tokerau
2. Auckland Central
3. Auckland South
4. Waikato
5. Rotorua
6. Ruapehu
7. Whanganui
8. Manawatū
9. Kāpiti
10. Horowhenua
11. Hawke's Bay
12. Christchurch
- 13. Tauranga (New February)**
- 14. Taranaki (New July)**

Expansions into new regions take a number of months of preparation, meetings, engaging interest from schools (EOI's), shoring up potential regional partnerships (to support on-going sustainability), engaging iwi, recruitment of staff and then movement towards a Pūhoro launch. Furthermore, Pūhoro works hard to understand the current organisational landscape in the region and ways to collaborate effectively to further enable successful delivery of the model.

Tauranga Expansion - Pūhoro successfully launched the programme with a launch event on the Toi Ohomai campus in Tauranga on 27th March 2025. The event was attended by five Tauranga schools who had demonstrated interest in joining the programme and, schools and Pūhoro staff were welcomed onto the Toi Ohomai campus by local mana whenua. Pūhoro is now delivering the programme to these schools in Tauranga and more schools have shown interest in joining the kaupapa.

Taranaki Expansion - Pūhoro has been working extensively once Tauranga expansion was complete, on effective expansion of the programme in Taranaki. Pūhoro has collaborated with Why Ora which is a health career focused charitable trust working exclusively in the Taranaki region and has pre-existing relationships in Taranaki schools. Pūhoro by effectively working together with Why Ora, has been introduced to the schools in the region and has now commenced delivery into the Taranaki region. We will be holding an official launch event on Friday 25th July at Owae Marae in Waitara. Additional schools have also expressed their interest in joining the Pūhoro programme. As we establish ourselves in the region more fully, we will onboard more schools in due course.

Pūhoro ākonga and Economic Outcomes – Social Cost Benefit Analysis (Treasury Modelling)

Pūhoro continues to show strong evidence of impact through measurement indicators that have been completed through social cost benefit analyses and the measuring of economic benefit analyses. Pūhoro has completed successfully five Economic Impact, Impact Evaluation, and Social Cost Benefit Analysis reports (most recent in 2024) which have been shared with the Ministry of Education. Pūhoro will be undertaking a new report in 2025 and is currently exploring this with Impact Lab for 2025.

Our December 2025 report undertaken by Matatihi Ltd underscores this in the following statements:

As a young and growing population, the future of New Zealand lies in Māori, particularly rangatahi, and their ability to gain and retain quality employment and business opportunities.

The Pūhoro STEM Academy partners with numerous secondary schools to operate a STEM (science, technology, engineering, mathematics, and Mātauranga) Academy to increase Māori student engagement in STEM programmes. Pūhoro supports students in secondary schools and tertiary education to prepare their Māori science students for employment and higher education. The Academy has had significant success in improving Māori educational performance rates.

Following three prior reports from 2018, 2019 and 2021, this latest report presents a thorough economic analysis highlighting the Pūhoro Academy's substantial economic advantages to students, the national economy, and wider society.

The Pūhoro Academy is working to improve Māori students' National Certificate of Educational Achievement (NCEA) pass rates, thus contributing to their educational and economic prospects. A cost-benefit analysis (CBA) reveals that the Academy's high school and university programs cover their costs by factors ranging from 3.1 to 80.8 times, respectively. In other words, for every dollar investment, \$3.10 is generated within the high school programme, and \$80.8 is generated within the tertiary programme. In what we consider the most robust scenario; the net present value of the Pūhoro STEM Academy is \$3,583 per high school student and \$398,012 per tertiary student. These figures represent net benefits of over \$2.6 million for the high school program and \$120 million for the tertiary program, marking an improvement from the 10:1 CBA ratio found in our 2019 analysis.

The net present value of the Pūhoro STEM Academy exceeds \$122m.

The Pūhoro Academy's impact extends beyond individual economic gains, stimulating regional economies with over \$5 million in added value annually and supporting 5.7 full-time equivalent positions outside its direct operations. The Academy's influence extends through communities, enhancing family wellbeing, increasing job satisfaction, promoting healthier lifestyles, and fostering greater civic participation among its graduates.

Moreover, the Academy plays an important role in addressing contemporary challenges, such as homeownership, by equipping students with the skills and qualifications necessary to improve their life prospects. The analysis underscores the Pūhoro Academy's effectiveness in providing immediate educational benefits and driving long-term economic and social improvements across New Zealand, thereby affirming its value as a valuable educational intervention.

***Social Cost Benefit Analysis – Economic Impacts of the Pūhoro STEM Academy
December 2024 – Matatihi Ltd***

Pūhoro Awards of recognition (2024-25)

The following awards have been presented to Pūhoro in 2024-25. They recognise our community engagement and impact in STEM.

Hapori Matihiko – Rangatiratanga Award (2025) - Pūhoro was recently awarded the Rangatiratanga Award at Hapori Matihiko Māori Tech Awards. The award recognised Arahi Hippolite's work in the Pūhoro STEMM Academy to further educate, uplift and inspire our rangatahi in the digital and technology space.

Community Initiative of the Year Award (2024)

Through our partnership with Genesis Energy, Pūhoro was recognised as part of the collective to receive the Community Initiative of the Year Award at the New Zealand Energy Excellence Awards ceremony in August.

Pūhoro previous Awards of recognition (2022)

The following awards have been presented to Pūhoro in 2022. Further recognising the important work and impact of the Pūhoro STEMM Academy

Ngā Āhuatanga o te Tiriti Award (2022)

This award recognises an organisation that demonstrates initiatives that embrace Te Tiriti and contribute to stronger and more robust partnerships and relationships with whānau, hapū and iwi.

Diversity Works supreme award winner (2022)

This award recognised Pūhoro for their commitment to te ao Māori, tikanga and core Māori values to support its people and learners, and address the disproportionate under-representation of Māori in the STEM workforce.

International Engineering and Technology Award (2022)

This award recognised Pūhoro for the most forward-thinking Equality, Diversity and Inclusion Programme in Engineering and Tech. The award celebrates innovation across the global sector.

Ends