

Taumata Aronui submission on Te Ara Paerangi Future Pathways Green Paper

Taumata Aronui is a group appointed by the Minister of Education (supported by the Minister for Crown Māori Relations) to provide independent advice regarding Māori and tertiary education. Among other things, this advice supports the Crown to work in partnership with Māori and to help the tertiary education system support Māori to succeed as Māori and to achieve a variety of other outcomes of national benefit.

We welcome the Future Pathways work and the opportunities it presents

We note the importance of the tertiary system to the Research, Science, and Innovation (RSI) system and applaud the Government for seeking advice regarding the future of this system. We also note the deep interconnections and interdependencies that exist between the RSI system and tertiary education.

On this basis, we would like to:

- Make a number of comments regarding Māori success in research, innovation and science.
- Propose the continuation and expansion of the Vision Mātauranga policy to include, among other things, the ability of Government to invest in research which is designed to increase the capacity and capability iwi/Māori organisations and communities to undertake research.
- Present to you a copy of *Manu Kōkiri: Towards a Comprehensive for Māori Success and Tertiary Education*. This soon-to-be-released paper contains a host of ideas that Taumata Aronui has sought to articulate as way of understanding Māori success in this arena. There are many points made in this paper of relevance to the RSI system.

Māori success and RSI

We have not been able to develop a comprehensive picture of 'Māori success' in RSI. However, we would like to make the following comments as a contribution to the kinds of success we see for Māori and as a consequence of Māori participation in and contribution to the RSI system.

Type of Success	Comment
Success represented by the number of Māori individuals training in the sciences and STEM subjects	The number of Māori individuals training in STEM subjects is still too low and needs to be raised.
Success represented by the number and significance of research projects led by Māori	The number of research projects led by Māori researchers also remains low and needs to be raised.

Success represented by the number of iwi/Māori organisations and/or communities who are able to conduct or commission research	The capacity and capability of iwi/Māori organisations and communities undertake and/or commission research needs to be grown.
Success represented by the successful and meaningful inclusion of mātauranga Māori in research , science and innovation activities	Mātauranga Māori is critical to ‘unlocking’ Māori innovation potential. It is not the only dimension within ‘Māori potential’, however, it is an important dimension. Clarifying the relationship between mātauranga Māori and science is critical to unlocking the Māori contribution to national goals through RSI.
Success represented by a growth in research culture within iwi/Māori communities.	<p>There is an ongoing need to enable better connections between research, science and technology and communities, to ensure the benefits of research flow into communities.</p> <p>There is a need to grow ‘RSI and mātauranga Māori literacy’ within iwi/Māori communities so that they can set research priorities, commission research and/or conduct research themselves, and make use of the fruits of research to bring about positive change.</p>

Expanded Investment in Vision Mātauranga

Taumata Aronui believes that the core principles and goals of Vision Mātauranga remain relevant. However, the policy should continue with some updates:

- The principle of ‘uplifting Māori participation in the RSI system’ should be introduced into the policy to sit alongside its existing principle of distinctiveness of;
 - **uplifting participation** – enabling investments is the primary aim to build the capacity and capability of iwi/Māori organisations, communities and people to undertake RSI; and
 - **yielding distinctiveness** – enabling investments that concern yielding contributions to national goals (economic, environment, health, social) through RSI that *can only* be sourced from iwi/Māori communities (their knowledge, assets, resources, organisations etc).
- Investment in Vision Mātauranga has been limited and unchanged since its inception in 2005. This needs to change in order to yield the real value of the policy for the benefit of the nation. We are disappointed by the low level of support and energy directed toward Vision Mātauranga since 2005. The intent of the policy is excellent, however, it has not been accompanied by a level of investment to grow the capacity and capability of iwi/Māori organisations and communities, together with Crown Research Institutions (CRIs) and universities, to undertake the research envisaged by Vision Mātauranga. We note with concern that there is no evidence of the Ministry

of Business, Innovation and Employment (MBIE)'s claim made in the introductory pages of the Green Paper, that the RSI system funds *all* types of research. There is currently an underinvestment by the RSI system in mātauranga Māori and kaupapa Māori research, with the system in need of redesigning. It is our understanding that the Government invests ~\$1.7 billion in research and development annually and that this funding largely goes to CRIs, universities, science groups and industry. In comparison, the Vision Mātauranga MBIE scheme which allocates \$2 million per year is the only fund dedicated to investing in mātauranga Māori. Given only ~\$2.5 billion has been paid in Treaty settlements over the last 30 years, the divide between government investment in Māori versus non-Māori knowledge grows bigger and departs from equity.

- Clarifying misunderstandings regarding the intent of the policy;
 - Vision Mātauranga is not *only* concerned with mātauranga Māori. The term 'mātauranga' is used in Vision Mātauranga to refer to *all* different kinds of knowledge required to undertake the research envisaged by the policy, including mātauranga Māori;
 - The misunderstanding that Vision Mātauranga was envisaged to be a 'total' policy designed to capture all the various dimensions of Māori involvement in RSI. Vision Mātauranga was designed to 'unlock Māori innovation potential' – contributions to national development that could only be sourced from the Māori world. Hence, it focuses on only one aspect of the potential Māori contribution and furthermore, a host of other issues are not addressed in Vision Mātauranga i.e., uplifting the number of Māori training in STEM, and Māori-led research projects not necessarily focused on unlocking something unique to Māori communities like research designed to enhance Māori owned pine forests performance); and
 - the misunderstanding that Vision Mātauranga requires all research funded by MBIE to include Māori partners or to be vetted by Māori. We are not entirely sure where this perception arises from; however, because Vision Mātauranga was included in the National Science Challenges, for example, it is possible that this was interpreted to mean that all research undertaken within the Challenges must have some kind of Māori involvement. Vision Mātauranga includes no such requirement (research projects of high and specific relevance to Māori will naturally have high Māori involvement).

Manu Kōkiri – Māori Success and Tertiary Education: Towards a Comprehensive Vision

We have developed a paper entitled '*Manu Kōkiri – Māori Success and Tertiary Education: Towards a Comprehensive Vision*'. It lays out our shared priorities and aspirations for Māori success and tertiary education (please see the full paper and a summary attached to this letter). Manu Kōkiri is not yet public, so we ask that it be treated as confidential and not be distributed to others until after it is officially released at the end of April 2022.

Among other things, Manu Kōkiri outlines what success looks like from the perspectives of Te Tiriti o Waitangi, mātauranga Māori, and the Māori economy. We wish to highlight two matters;

- the potential role of Te Tiriti o Waitangi in research, science and innovation; and
- the need for investment in mātauranga Māori.

We strongly advocate for Te Tiriti in tertiary education and in the RSI system...

We consider that Te Tiriti can be used as an instrument for enabling positive and creative encounters between kāwanatanga and tino rangatiratanga. Such a creative encounter is motivated by a desire to discover meaningful and valuable responses to the realities, challenges and needs of life. Our advocacy for Te Tiriti is about advancing a vision for a way Aotearoa New Zealand could be as an open, democratic society which its indigenous dimensions enhance, strengthen and make unique. We make a number of suggestions in Manu Kōkiri (see page 42) on how organisations can meet their treaty obligations as well as make use of significant opportunities. These could be extended to the RSI system.

... however, there must be greater investment in mātauranga Māori

Mātauranga Māori is a national taonga and its potential to make valuable contributions to the life of our country has yet to be fully realised. A key concern we have is about how the RSI system will ensure it is a place where Māori can thrive.

The role, place and contribution of mātauranga Māori to research, science and innovation remains vague and unclear. This must be clarified to address misunderstandings and ease concerns over the continued underfunding of Māori researchers and mātauranga Māori. Understanding and valuing mātauranga Māori is of critical importance if the RSI system is to meet the Crown's Tiriti opportunities and obligations. Additionally, the RSI system can only benefit from significant investment in mātauranga Māori.

There has been recent debate about mātauranga Māori and science. While there is much in mātauranga Māori that is not science, we reject the assertion that a kind of science (at least) was not conducted in mātauranga Māori in history, if not science itself. The relationship between mātauranga Māori and science is nuanced. Science is an important part of mātauranga Māori, though the definition of mātauranga is expansive and concerns knowledge more broadly. Nevertheless, an enormous imbalance of power exists between mātauranga Māori and science which significantly hampers the quality of this debate. The resources available to mātauranga Māori to articulate and/or defend itself, compared to those available to science, are miniscule.

There also seems to be a disconnect between what the RSI sector and funding bodies seem to value, and what we have been told Māori researchers, communities, and other end-users value. To rectify this, it is necessary to ensure that mātauranga Māori is not marginalised within funding systems, and that Māori are afforded resources to be our own leaders of research. We consider it important that the management of any research funding for mātauranga Māori be put in the hands of Māori and propose this happens through the

creation of a new funding body resourced by the Crown, but managed by Māori, in a similar way to the new Māori Health Authority.

Investment in mātauranga Māori has positive potential

Mātauranga Māori has great creative potential to positively contribute to and transform the RSI system and Aotearoa New Zealand as a whole. The garnering of this creative potential can be seen with examples like [mātauranga Māori being used in environmental science and management in the revival of lakes](#) and the contributions made by Māori astronomer Dr Rangi Mātaamua and his extensive knowledge about astronomy and Māori traditions. Such examples highlight the opportunities that exist for mātauranga to contribute to progress and innovation.

Investment through the RSI system into mātauranga Māori can also help to contribute to the Māori economy. The 'Māori Economy' has existed in Aotearoa New Zealand for centuries and is now estimated to be worth around \$70 billion. The Māori economy operates in a range of overlapping sectors of the economy. There are opportunities for wealth and value creation that do not exist in any other part of the New Zealand economy as they involve assets and resources unique to the Māori world. This includes knowledge and intangible cultural assets including te reo Māori and mātauranga Māori. Investing in entrepreneurial ventures and initiatives seeking to innovate within this space will add great value to both the RSI system, the Māori economy, and the wider New Zealand economy.

Further, investment in mātauranga by Māori for Māori would benefit Aotearoa where it aligns with government initiatives like health and wellbeing, three waters, zero waste/sustainability and technology. For example, mātauranga Māori provides a nuanced understanding of genomics that can be utilised within health research.

However, there are workforce issues that must be addressed. For example, an unfair burden and expectation is placed on Māori researchers to upskill and provide cultural support to other research projects, taking away from their capacity to conduct their own research.

In summary

The Vision Mātauranga policy remains relevant and ought to continue. However, it must expand to include the principle of participation to supplement its existing focus on distinctiveness. The policy should continue to enable investments in research, science and technology projects which are designed to yield the distinctive contributions of Māori communities to economic development, environmental sustainability and health and social wellbeing. However, the policy should also enable investments which are primarily about increasing Māori participation and involvement in RSI. This means supporting Māori individuals to study in STEM at various levels, as well as supporting Māori organisations to partner effectively with research providers or to build their own research and research management capabilities. Such investments will help to realise the creative potential and the distinctive contribution that mātauranga Māori can make to Aotearoa New Zealand as well as ensure the RSI system is meeting its Tiriti obligations. Please see the attached copy of Manu Kōkiri for a detailed account of our views.