Enabling mana motuhake (self determination) for rangatahi in a new green economy: **a rangatahi perspective**

TE TAIWHANGA RANGATAHI

EST 2021

THE AUCKLAND CO-DESIGN LAB

The Southern Initiative
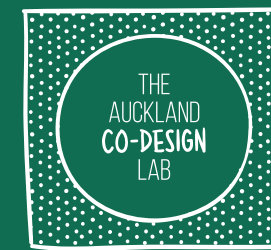
Kura of the Future

"Bro, in like 10 years' time you'll see students actually like, wanting to go to school and learn rather than just having to go to school as an obligation. I love this, please keep it up, because I want to see this change."

Year 13 student feeding back to everyone at an idea testing workshop

Te Taiwhanga Rangatahi & TSI

Who are we?

Te Taiwhanga Rangatahi is a youth design and innovation lab in **The Southern Initiative (TSI)** at Auckland Council. We help government, council, family and the private sector understand South Auckland rangatahi, through South Auckland rangatahi.

Currently the team has seven young designers from South Auckland, support from adults and a network of rangatahi peers who we are working with from Tāmaki ki te Tonga and the rest of Tāmaki Makaurau.

TSI champions and enable social innovation by working with our communities to learn and prototype solutions, and then influence the levers that will drive social and economic transformation for south and west Auckland.

TSI team and Te Taiwhanga Rangatahi with participants at our first intergenerational ideation workshop on 1st December, 2022

Te Hautū Waka

Our approach

We create spaces for rangatahi to share ideas with policy-makers so rangatahi and pākeke can take action together on issues that matter to rangatahi—like education, employment and the environment.

We use **Hautū Waka** as an indigenous design framework to navigate a design journey as well as other design tools to collaborate with rangatahi and pākeke.

Hautū Waka credit:
Hautū Waka is a knowledge system that is founded in atonement to everything in and around you and to tohu sighting or mapping. Based on work done by Roimata Tahiwha-Paoo and Ayla Hoeta, guided by Matua Rereata Makiha

Te Whiwhinga
A closer look at the tohu, Te Rawenga is in sight, a lot of work to be done

Te Rewenga
Celebrate, reflect, acknowledge tohu

Te Whainga
Digging deeper, researching, exploring tohu

Whakariterite
Preparation of crew

Te Kitenga
Sighting tohu to project you forward

Te Rapunga
Venturing into the unknown

Hautū Waka A framework for navigating complexity

The Southern Initiative

THE AUCKLAND CO-DESIGN LAB

Our journey

Whakariterite
Preparing the crew

November '21 – January '22

- Forming the team
- Understanding the different parts of our big pātai or design challenge
- Discovery, understanding and scanning research about education, employment, training, the economy and the circular economy
- Understanding who we needed to talk to
- Practising the Hautū Waka as a methodology

Te Rapunga
Venturing into the unknown

January – March '22

- Preparing interview guide
- Rangatahi designers interviewing pākeke including people with experience in supporting or developing policy and programmes involving youth in education, training and employment from the community and public sector; indigenous and green entrepreneurs from the private sector
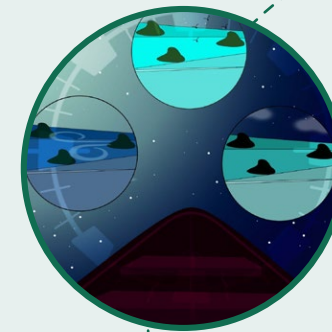
Te Whainga
Digging deeper, exploring

August – December '22

- Developing insights
- Developing and executing a workshop for rangatahi
- Checking the insights with rangatahi
- Developing personas
- Designing and executing a workshop for pākeke and rangatahi to brainstorm
- Visit to a kaupapa Māori circular economy business

Te Whiwhinga
A closer look

January – March '23

- Analysing the ideas
- Developing concepts
- Testing the concepts
- Improving the concepts
- Getting feedback from various stakeholders who can use these ideas (or parts of them)

Te Kitenga
Sighting tohu

April – July '22

- Understanding the lived experience of rangatahi from year 9 to school leavers who have transitioned to a job or further education and training
- Analysing the interviews
- Drawing a rich picture of what we are seeing in the system
- Hikoi to understand urban design careers

Te Rawenga
Celebrate, reflect, acknowledge tohu

At least one idea / part of an idea gets taken on by a stakeholder so that more Māori and Pasifika rangatahi are inspired by, enter and stay in higher value green career pathways

This document

01.   **Whakariterite.** Our big pātai (question)

02.   **Te Rapunga.** Four stories

03.   **Te Kitenga.** What we learned

04.   **Te Whainga.** Guiding tohu

05.   **Te Whiwhinga.** The vision

01.
Whakariterite
Our big pātai

Our big pātai

TSI is focused on achieving equity for Māori and Pasifika whānau. Mainstream education, training and employment contribute to a gap in income and wealth for Māori and Pasifika compared to others. We also know what does and doesn't work and opportunities for change based on prior work like the Attitude Gap, Kia Mārama Mai Kia Whakapono Mai, Youth in the South[1].

Youth Economy and other teams in TSI were interested in how to enable mana motuhake for rangatahi in a new inclusive green economy. Also, during the Covid-19 pandemic, people had been talking about Building Back Better and taking into account the taiao.

The rangatahi needed to frame a question they could understand so they decided on "how might increase the number of Māori and Pasifika rangatahi into higher value green and tech career pathways"

[1] tsi.nz/our-reports
     aucklandco-lab.nz/reports

How might we increase the number of Māori and Pasifika rangatahi into high value green and tech career pathways?

Definitions

We define Green and Tech as technology and science-based solutions that mitigate the negative human impact on te taiao in a broad range of fields from agriculture to architecture*

Think: urban planning, product design & manufacture, landscape and architecture, water management, transportation, alternative energy, recycling, carbon capture, sustainable agriculture, smart technology, regeneration, solar power

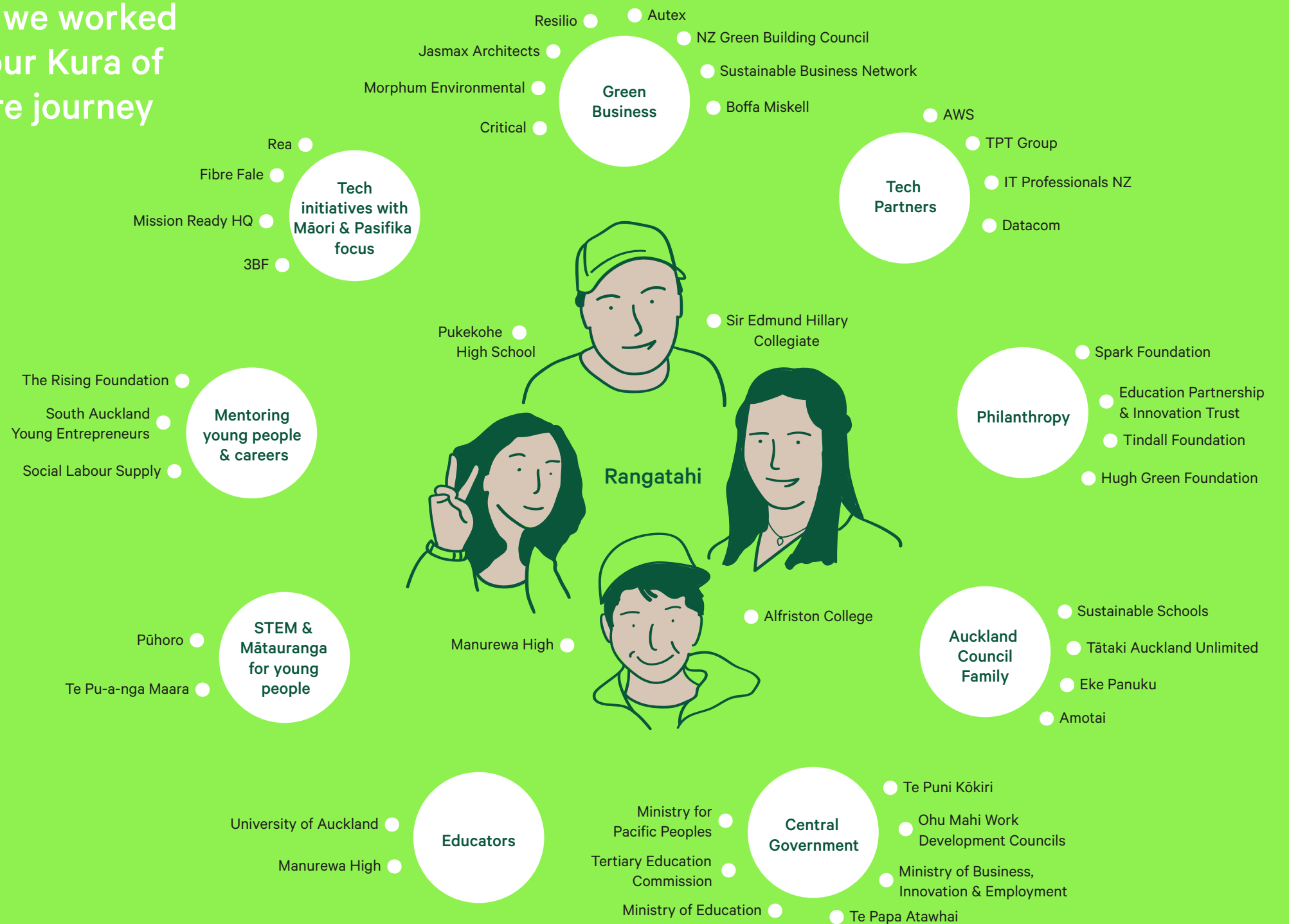*   from the World Economic Forum

Our ecosystem

In recent years many great initiatives for rangatahi have emerged. We have learnt a lot from them along the journey.

In this document we present Kura of the Future as a vision and a concept. This does not and should not displace or replace any of the awesome mahi already taking place. Rather we seek to amplify, encourage, connect and find tohu that help us all get closer to the mission and build a reciprocal and collaborative ecosystem response that is regenerative.

Note. The map opposite gives a sense of our context but it is not exhaustive nor does it attempt to show all relationships.

Climate Connect Aotearoa has made a great start with their Climate Innovation Ecosystem Map.

Partners we worked with on our Kura of the Future journey

Green Business
- Resilio
- Autex
- NZ Green Building Council
- Jasmax Architects
- Sustainable Business Network
- Morphum Environmental
- Boffa Miskell
- Critical

Tech Partners
- AWS
- TPT Group
- IT Professionals NZ
- Datacom

Tech initiatives with Māori & Pasifika focus
- Rea
- Fibre Fale
- Mission Ready HQ
- 3BF

Philanthropy
- Spark Foundation
- Education Partnership & Innovation Trust
- Tindall Foundation
- Hugh Green Foundation

Mentoring young people & careers
- The Rising Foundation
- South Auckland Young Entrepreneurs
- Social Labour Supply

Rangatahi
- Sir Edmund Hillary Collegiate
- Pukekohe High School
- Alfriston College
- Manurewa High

Auckland Council Family
- Sustainable Schools
- Tātaki Auckland Unlimited
- Eke Panuku
- Amotai

STEM & Mātauranga for young people
- Pūhoro
- Te Pu-a-nga Maara

Educators
- University of Auckland
- Manurewa High

Central Government
- Te Puni Kōkiri
- Ministry for Pacific Peoples
- Ohu Mahi Work Development Councils
- Tertiary Education Commission
- Ministry of Business, Innovation & Employment
- Ministry of Education
- Te Papa Atawhai

02. Te Rapunga
Four stories

How do rangatahi end up where they do? What influences their journey?

Te Taiwhanga Rangatahi prepared four personas based on their interviews with rangatahi and pākeke (adults).

These stories help us to enter into and understand the problem through the lived experience of rangatahi and employers.

Matu

Kia ora! Ko Matu ahau.

I'm from South Auckland, or as we like to call it, Southside. I pretty much grew up here. The community is what made me the person that I am now. I guess you could say I was lucky, growing up with a whānau that cared about what I was going to be, but mostly I ended up going with the flow, whatever my parents wanted me to do I did it. I wasn't particularly interested in any one thing, but I was good at anything I put effort in to. With a big whānau and having the 'aunties and uncles' (mostly family friends) I was always inspired by the way they'd always be around and hanging, I felt connected.. They'd always tell me I would grow up to be great, but never really told me how so I just ignored it.

I'm in my last year in high school. Keeping fit with sports, doing good in Maths, Bio and holding down my reo and tikanga in Māori. No joke though I'm a little worried about what I'm going to become afterwards. I want to be a role model for the bros and my siblings, but I just don't know what's out there for me, nobody really guided me to a career pathway or even spoke to me about any. I guess for myself, I haven't looked hard enough.

Fortunately for me, I was approached by one of the programmes that support exploring passions, interests and career pathways. The tuākana in the programme have been helping me explore and lay out my options which is super helpful! They've been tracking my studies and pushing me to succeed while trying to find suitable career options based on my subjects. In the school holidays they took everyone out to a Career's Camp to check out some different jobs. The companies invited to the day were offering a trial run to see if we're interested in the work that they do and if we want, we can apply for it afterwards. It's lowkey scary to think that I'll have to do an interview and stuff if I like a job so hopefully this helps me out, but the people in the programme will help set me up right if I need to.

I have my eye on a couple jobs but I'm just gonna test them out, I don't know yet, but I'm sure I'll find something that I'm good at and helps me give back to my people. One looked cool when they said, "Ko au te awa, ko te awa ko au". I'd be keen to help protect the taiao, at least I'll look cool doing it.

Lilith

Hi! My name is Lilith.

I entered a South Auckland high school when I was 15 years old. I struggled at first connecting with some school subjects because I didn't see how they connected with my culture. I asked around for any clubs, or workshops that were on after school to see if I could do something that I could connect to such as drawing or being creative.
My parents would always ask about what I wanted to do in the future. I told them that I want to work in animation and see if I can incorporate my culture into it. I think my family is supportive of me pursuing my passion which makes me feel good.

I came across a poster for a makerspace and decided to sign up. I had found the stepping stone for my dreams as they had workshops around blender, photoshop and other drawing tools. What I liked about makerspace is that I could be myself and use my culture in my work—I was actually encouraged to do so. It was easy to make friends here because we were all into similar things. Even our tutors were cool, they were like our older brothers. I could now work towards my dream of being an animator!

In my senior years at high school I was employed by makerspace, while training to become an artist in animation. Makerspace opened the opportunities to not only develop my creative skills, but also show others the cultural opportunities within the work they do.

After leaving high school I became a part of a company called Awakening. I am now working on a project about mythology within multiple cultures. I still stay connected to makerspace which is cool because I can ask for help from them. This is useful for me because I get to tap into fresh minds of creativity, and they can input into a real project. It also re-energises me when I see young people's passion—it reminds me of when I was at makerspace. I love this mahi because I can incorporate and use all the cultural values and aspects I can while making my dreams come true.

Ken
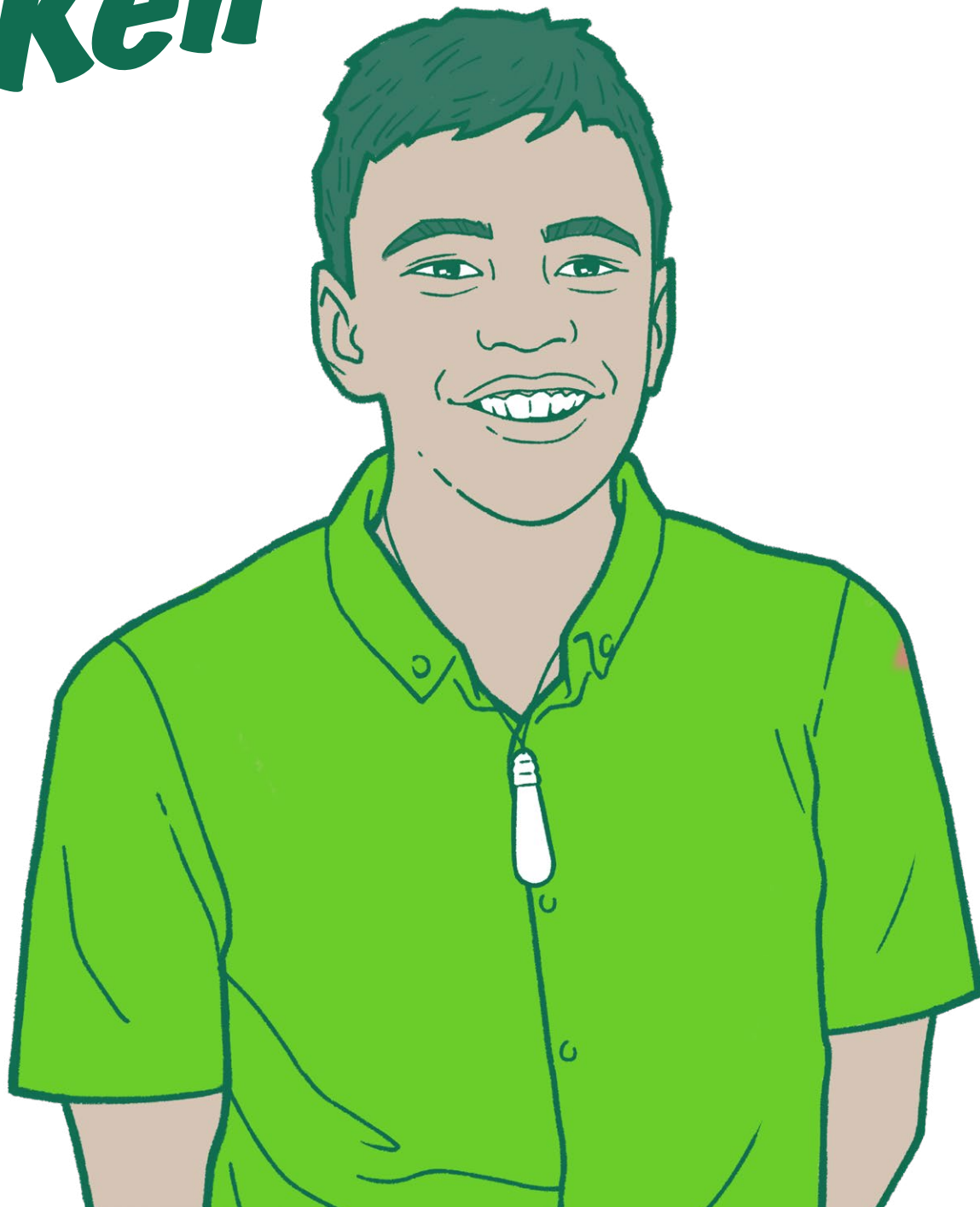
Kia ora, my name is Ken.

I am a quiet but very passionate individual. Although I have a good relationship with both of my parents, I am closer to my mum. As a kid I was very active, going outside to play games with others on the street or climb trees at the park. Being a hands-on person, I would often break my toys and fix them. I am easily distracted, but do pay attention if it is exciting to learn and relevant to my life.

Growing up in a busy family I realised the importance of having a job. I see my mum and dad always going to work and will often have conversations with them about how hard they work for our family. This encourages me to work hard, but also work smart.

In year 10, I didn't really like going to science because my teacher would always point out my mistakes. My class got a new teacher who was a lot nicer to me, and from there I started enjoying science and chose it for year 11. In year 11 my class went on a school trip for Science & P.E to go diving. We learnt how to dive but also how to keep the environment clean. We actually found a trolley in the water. I felt really good when we pulled it out because it felt like we were making a difference! This encouraged me to create a device with my friends to make pulling rubbish out of the water easier.

Now I'm in my final year in high school. I still excel in PE, music and science. My relationship with my teachers is good enough that I pay attention in class (most of the time!). My goal now for the future is to make things that help the environment. I just need to figure out what to do next.

Aaron

Kia ora, I am Aaron.

I am a senior manager at an engineering firm. We work in the built, natural and social environments, using a range of technology and innovation. We know it would be better for our business if we could diversify our workforce—future societal and environmental challenges demand it for us to remain competitive. The opportunity is there too. We have many contracts which require a high level of cultural competency as well as expert capability to design and build infrastructure, all while respecting the environment.

I'm also getting more and more questions from my clients, our exec leadership team and bidding teams about the number of Māori and Pasifika people we employ and the number of Māori and Pasifika businesses in their supply chain. There is pressure to increase these numbers, but we don't really know how to do it quickly, and don't even have the resources for it.

We have tried setting up cadetships specifically for Māori but found it really hard to recruit candidates for these opportunities. And then when we did, it was difficult for my managers to slot them into busy project teams—people just didn't have the time to show them the ropes. COVID-19 didn't help as a couple of the cadets we hired weren't able to work from home— we weren't sure why but the young people stopped turning up to online meetings.

We're not getting any Māori or Pasifika graduates coming through our graduate programmes either. The graduate recruitment team has pointed out the low numbers of Māori and Pasifika entering and graduating from university are actually non-representative of population levels.

We know we have to take a different approach but honestly we're not sure how or where to start. Should we start working with schools? How do we interact with schools? Should we speak to their existing Māori and Pasifika staff members?

03. Te Kitenga
What we learned

What do rangatahi need and value?

Insights from 26 interviews; 13 with rangatahi from years 9 through to rangatahi who had left for a job or further training or education and 13 with pākeke from the public and private sectors, including green, tech and indigenous entrepreneurs.

Relevant and up-to-the-minute career advice is not reaching rangatahi

Rangatahi weren't aware of what was out there or how to get there, especially when it came to green / tech pathways.

Advisors in schools tend to be stretched for time, older teachers, and not necessarily connected or keeping up with the green / tech sector.

Rangatahi were also more likely to connect with support, information and advice and think it's achievable when it's coming from someone they relate to.

Whānau / aiga are very influential but often have 'old school' ways of thinking about careers

They still think about doctors and accountants or the trades.

People rangatahi can relate to have a profound influence on career direction and interest in learning

Rangatahi stayed engaged in learning where they had a positive relationship and bond with their teachers or peer group.

Rangatahi with the right personal support are more engaged with learning in general. They also have an easier time transitioning from school into further education, employment and training.

Culture and identity reflected in learning or the workplace is really motivating and affirming for rangatahi

Rangatahi want to include culture in learning and express it within class, school and work.

They need a landing space that allows them to feel safe, connected, where they can be their authentic selves.

Rangatahi think high value careers empower themselves, the community and the taiao

A job in green / tech matches up with what rangatahi value but they have limited understanding about the possibilities.

The way maths & science are taught doesn't match up with how some rangatahi learn best

Rangatahi found maths and science uninteresting and didn't understand the relevance in their everyday life.

Learning that was hands on, away from the classroom or where they could see their culture was more motivating.

Puhinui Stream Regeneration Project, Auckland Council

A career pathway starts earlier than rangatahi, businesses and pākeke typically start thinking about it

Rangatahi often reach Year 12 or 13 locked out of a pathway they might have been interested in or locked into a pathway that limits their opportunities.

Businesses start thinking about their own talent pipeline from Year 12 or 13 or university.

Larger green / tech companies aren't well set up to support young Māori and Pasifika or understand their culture—they would like to but they don't know how

Note. There has been some progress here since the Attitude Gap study but there is still a lot of work to be done in this area.

Māori and Pasifika businesses and leaders have a more collective mindset and are more likely to support their young people.

Some pakeke also felt that a moana peoples' tech sector—by us for us is needed.

Green / tech employers are not well connected to schools and kura, especially in South Auckland

Businesses need to build more connections and both business and schools need to be open and resourced to develop these relationships.

We took these insights and 5 design challenges to an ideation workshop with rangatahi, policy people, government, teachers, career advisors and employers.
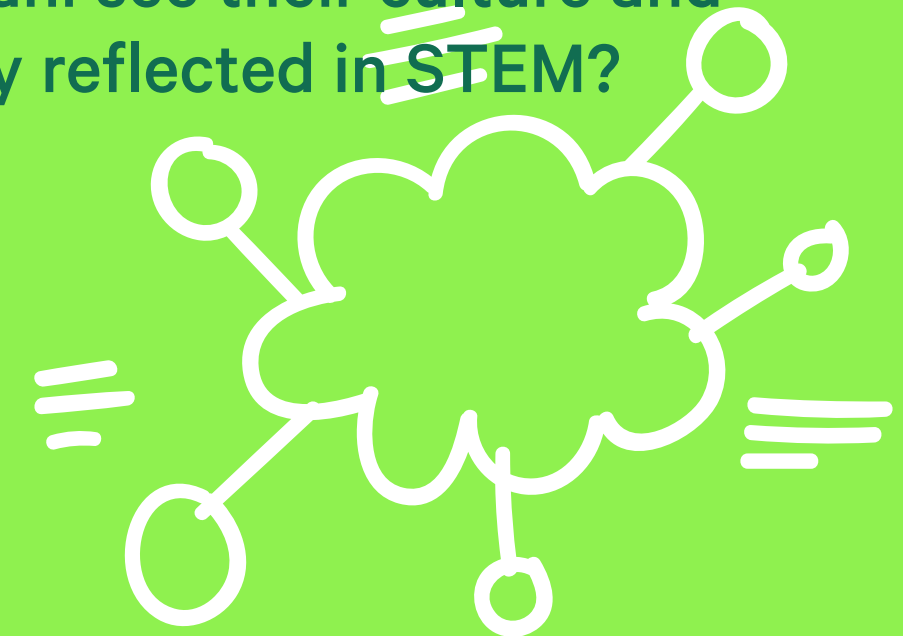
5 design challenges:

01 How might we inspire rangatahi into science, technology, engineering & maths (and related careers)?

02 How might we support rangatahi to stay in STEM related pathways and achieve their dreams?

03 How might we transform the way rangatahi figure out what they want to do and understand the options?

04 How might we support green / tech employers to access and engage with rangatahi and their whānau?

05 How might we support educators, trainers and employers to help rangatahi see their culture and identity reflected in STEM?

From the workshop, these tohu or themes and ideas helped guide our journey:

Whole of 'Aiga approach, Uptempo

Reggio School, Madrid. Andrés Jaque / Office for Political Innovation. Photo: José Hevia

1. Knowing options

Rangatahi don't know what's out there and South Auckland rangatahi in particular are often channelled into trades or retail.
We need to look at ways to help rangatahi see what the options are.

2. Involving whānau

Involving the whānau and a 'whole-of-Aiga' approach was acknowledged as super important—but exactly how hasn't been cracked.

3. A new system

One team thought we needed to rethink the whole education system: curriculum, teaching methods, environments, assessments, environments.

Testing water at Puhinui Stream Regeneration Project, Healthy Families and Te Pu-a-nga Maara

Critical

4. Indigenising education

Incorporating indigenous knowledge into learning supports identity. For example, looking at how fishing nets were designed by iwi, or navigating by the stars could be used in maths or technology. Achieving this would probably require some kind of teacher training.

5. Making STEM fun & relevant

Teaching methods and learning environments need updating. More experimentation, field trips and hands on learning are a good place to start.

6. Green Tech School to Sector Programme

South Auckland rangatahi are not being exposed to green / tech employers. We need to re-imagine a green tech 'gateway' connecting green / tech employers with schools and including paid work experience and micro-credentials.

04. Te Whainga
Guiding tohu

How do we create change?

A framework based on four key needs and six rangatahi design principles.

Opportunity areas

To support rangatahi into high value green / tech careers, we need to address four key needs:

Relationships

The power of that one person who believed in you, the mentor/teacher/tuakana/role/parent/peer.

Different ways to learn

Making STEM fun, relevant and hands-on. Seeing your culture and identity in STEM learning.

Opportunities & access

Opening doors, finding ways to experience green/tech employers early on, meeting people in these jobs, imagining that these spaces could be for you.

Options & inspiration

Understanding the whakahara (vastness) of what's out there, what you like and how you might earn.

Design principles

After talking to rangatahi and pākeke, reviewing the evidence and through our practical experience we learned there are some things that will help rangatahi to:

- Understand a wider range of career options;
- keep their career options open when they are unsure;
- access their preferred option when they are ready;
- and stay on their chosen higher value pathway.

We have shaped them into principles which can also be a useful tool to test all of our mahi in this area— whether you are a kura, a community organisation, a youth organisation, a business, a government agency or local government.

Design principle 1.

Backing the tribe

We back the many cultures and worldviews from Te Moana-nui-a-Kiwa through implementing and practising them every day starting with Tikanga Māori.

Example

Practising tikanga taketake by opening learning and work days with karakia and ensuring that we connect through whanaungatanga. Also we whakanoa—(remove tapu) by sharing water or kai.

Design principle 2.

Ko au te taiao, ko te taiao ko au

The taiao (nature) is a reflection of us. We look after the taiao.

Example

We think about the taiao when designing any learning and career experience—for example we learn to use materials that are renewable and recyclable in our learning and at work.

Design principle 3.

Early as!

When we create experiences that showcase careers, they should be done earlier than years 12 and 13 when for many rangatahi it is too late.

Example

Career experiences should be offered to rangatahi in years 9 and 10 and not just years 12 and 13.

Design principle 4.

Tauturu

To help, to assist. Rangatahi need support throughout their journey of learning and transition to careers.

Example

Having a hoa haere or a tuakana (mentor) to guide and nurture rangatahi when they are learning in kura and when they are experiencing or transitioning into green and tech career pathways.

Design principle 5.

Bring the fams

Involve the whānau on the learning and career journey of a rangatahi wherever you can.

Example

Give whānau a login!

Design principle 6.

Match my mauri

Pākeke (adults) and rangatahi must equally put in energy and effort in learning, training and employment.

Example

Pākeke must respect rangatahi needs and wellbeing, and offer holistic support; rangatahi must respect the employer and teachers' needs and strive to complete mahi.

...and it goes without saying

Involve rangatahi!

Invite and support rangatahi to help design your initiative, programme or policy.

Example

Create the time and a safe space for rangatahi to contribute ideas and insights on the issue. Te Taiwhanga Rangatahi was set up for this purpose.
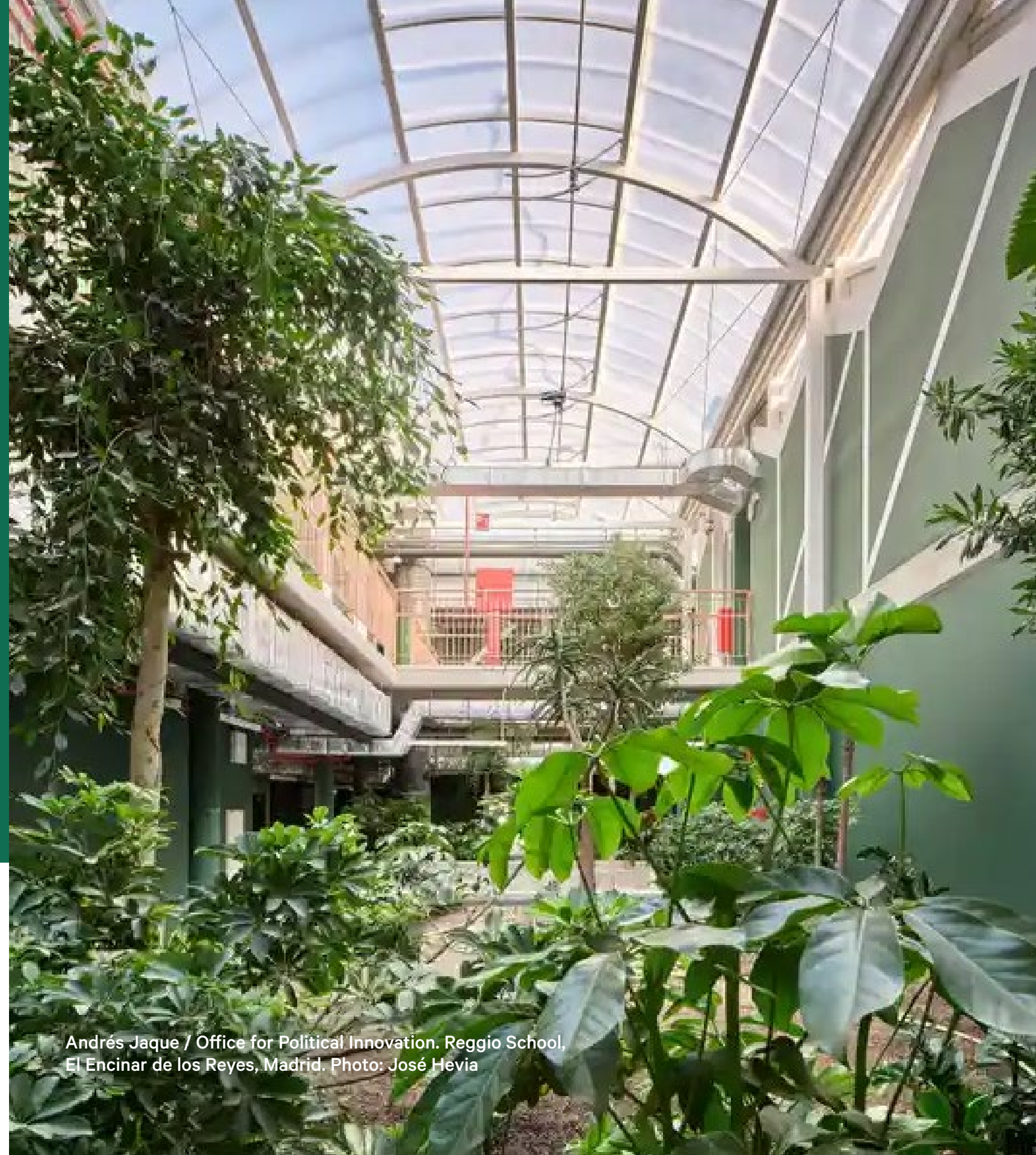
05. Te Whiwhinga
The vision

Introducing

Kura of the Future

A re-imagined secondary school connected to local tertiary providers and industry partners to make STEM fun and relevant and which also values indigenous mātauranga and pūrakau.

Andrés Jaque / Office for Political Innovation. Reggio School, El Encinar de los Reyes, Madrid. Photo: José Hevia
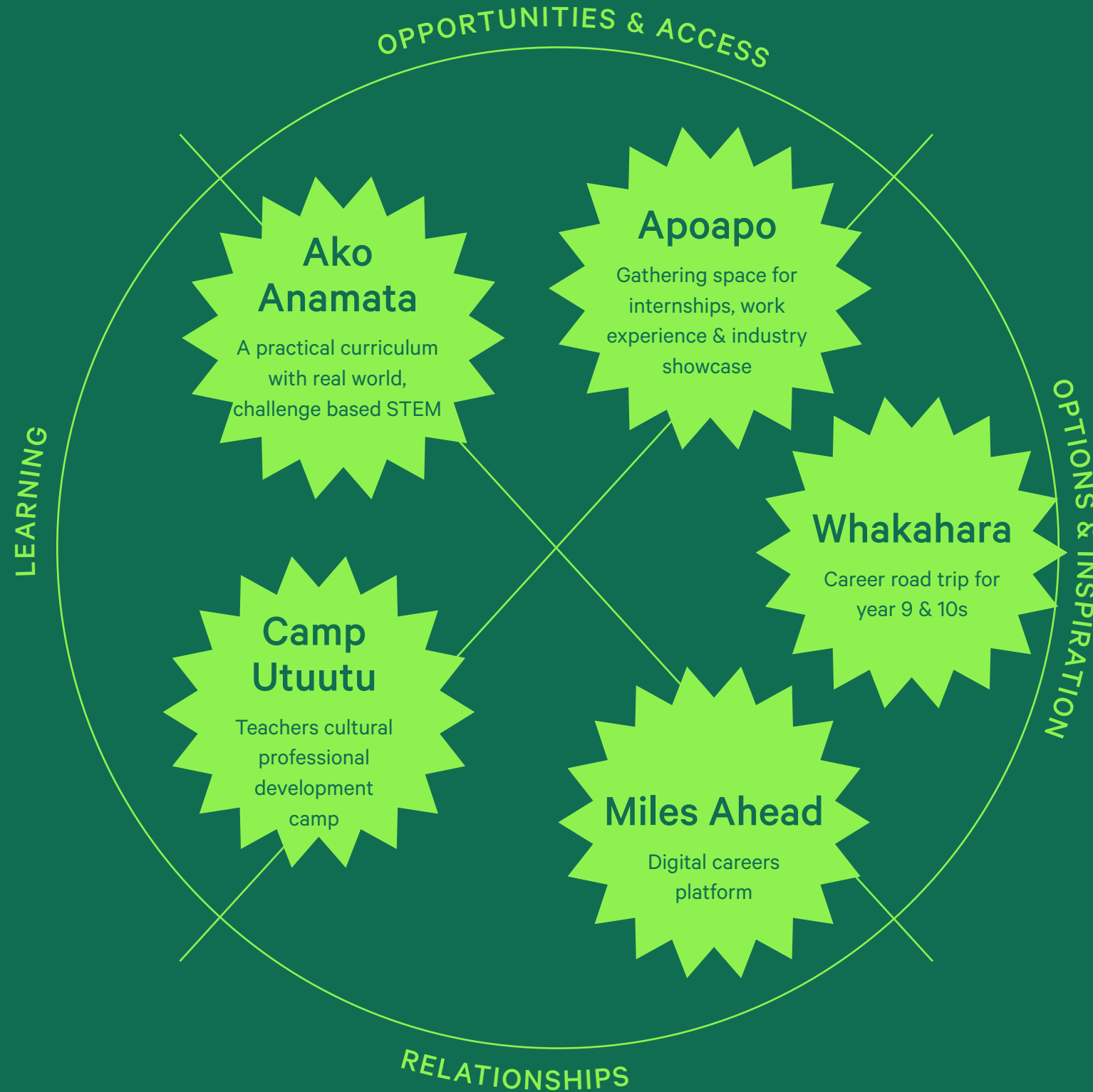
A suite of ideas work together to create Kura of the Future

They address the four opportunities for change we identified:

1. **opportunities & access**
2. **options & inspiration**
3. **relationship**
4. **learning**

And are underpinned by our design principles:

Backing the Tribe
Ko au te taiao ko te taiao ko au
Early as!
Tauturu
Bring the fams
Match my mauri

OPPORTUNITIES & ACCESS

LEARNING

OPTIONS & INSPIRATION

RELATIONSHIPS

Ako Anamata
A practical curriculum with real world, challenge based STEM

Apoapo
Gathering space for internships, work experience & industry showcase

Whakahara
Career road trip for year 9 & 10s

Camp Utuutu
Teachers cultural professional development camp

Miles Ahead
Digital careers platform

TTR developed the following ideas to test in February 2023. Through workshopping the ideas with participants in the design process TTR wanted to see what people thought.

Improvements, build ons and gaps in knowledge have been included for each concept.

At the time of publication the Whakahara concept is already on its way to being prototyped. We hope that the other concepts are of use to other stakeholders in the ecosystem and will be prototyped in the near future.

Please contact us if you are interested.

Whakahara

A road trip exposing Year 9 & 10 rangatahi to the possibilities and relevance of STEM by visiting various green / tech companies and participating in hands-on workshops at tertiary institutions.

The road trip helps rangatahi get excited about their futures and widen their lens of what's possible—even of themselves. They document and share their trip.

Whakahara: vastness, enormity, extensiveness, immensity

WHY IS IT IMPORTANT?

Early intervention
Rangatahi in years 11-13 are often targeted for careers advice when it is too late to start their journey.

Making STEM relevant
Rangatahi don't understand the relevance of maths and science in life, work and jobs that pay more.

Tuakana Teina
Rangatahi are supported by tuakana as they navigate these unfamiliar spaces.

Visits to green tech companies and innovators
This could be in food production, agriculture, engineering, fashion, health, architecture…

Above left: Leaft Foods (NZ) exist to reduce the environmental impact of food production through their plant protein

Sharing the journey
Rangatahi photograph, write about and share their experience so other rangatahi can benefit too.

Left: rangatahi at AirNZ x National Geographic photo camp. Photo credit: Fraser Clements
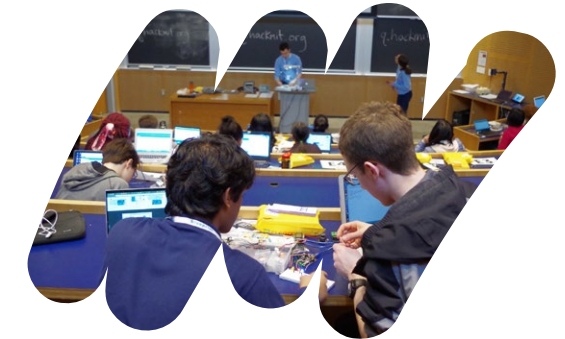
Try before you buy
Rangatahi get the opportunity to explore STEM related fundamentals like basic coding or product development through hands-on workshops with tertiary students.

Above: Students at Blueprint Hackathon MIT participate in a 'learnathon' before they create a project. Image credit: Jessica Sun

INSPIRATION

Fibre Fale is creating a 'Vaka Experience' designed to introduce young pasifika to tech workplaces.

Roadtrip Nation produces educational career content and experiences to support young people to find their pathway and pursue fulfilling careers.

Who is Whakahara for?

The people experiencing or 'using' and interacting with the idea.
NB. all ideas benefit rangatahi but they are not always direct 'users'
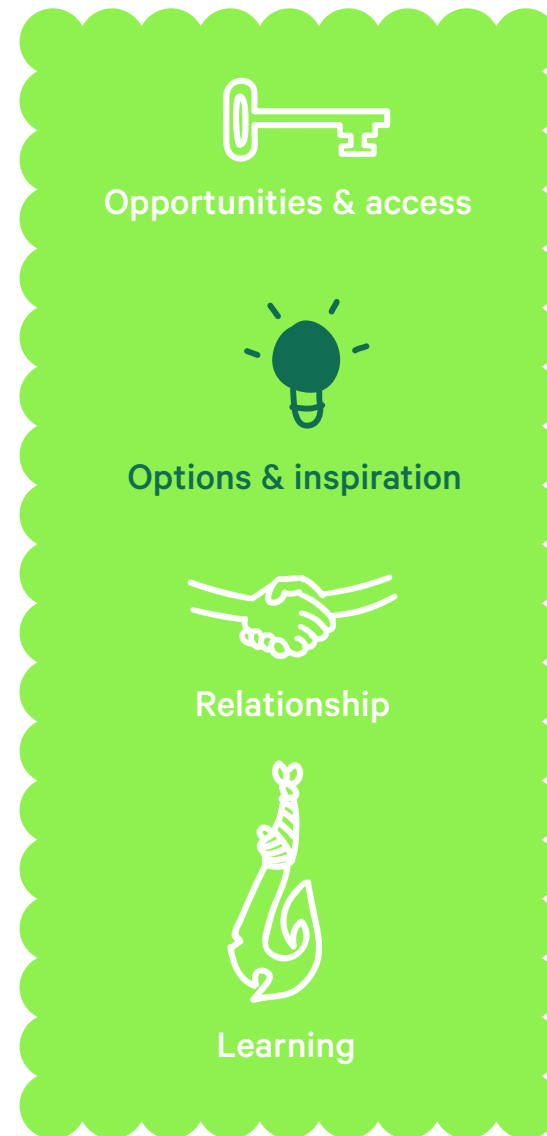
Year 9 & 10 rangatahi

Before they have to make any decisions that affect their career direction

Need state

What needs does this idea address?

Opportunities & access

Options & inspiration

Relationship

Learning

Things needed to make it real

People / capability *who / what skills do we need on the team?*
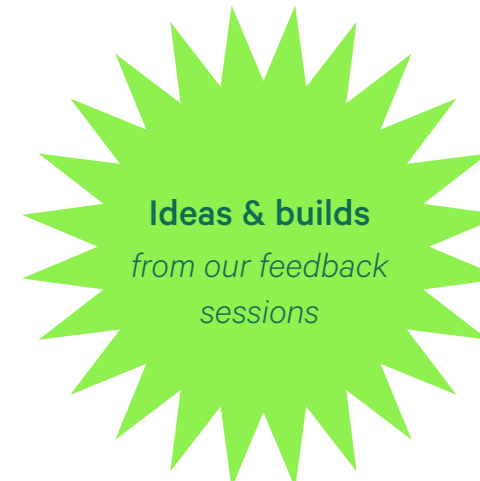Green and tech businesses and networks
Rangatahi mentoring

Partners *what partners could support this idea? who has expressed interest?*
Sustainable Business Network
The Rising Foundation
TEC

Policy *what policy is needed or could support this idea?*

Materials / resources
Time to prepare experience
People time
Transport for Rangatahi to offices

Knowledge gaps *things we need to prototype and test*

- How might we ensure employers are able to host rangatahi in a culturally safe manner?
- How might this be funded? Who could sponsor it?
- What does success look like and how is it measured?
- How do the numbers work? How many rangatahi could be on a road trip? How long should it be? How frequent?
- What is a short list of role models?

Ideas & builds
from our feedback sessions

- Info packs to take home for whānau
- Personal development for rangatahi
- For year 7&8 and year 11,12,13 as well
- Show people who have just started their careers as well as those who have succeeded
- Employers learning how to engage with rangatahi
- Pooling what different schools can offer and broadening the opportunities for different students

Miles Ahead

Miles Ahead connects rangatahi and whānau with green / tech professionals in a Q&A style decision-making digital platform.

They can ask questions, learn and explore options while making valuable connections in industry.

WHY IS IT IMPORTANT?

Relatable
Miles Ahead connects rangatahi to career support information and advice from professionals they can relate to.

Gets whānau on board
Parents and caregivers often have old school thinking about career pathways—Miles Ahead shows them the potential for a high value job beyond doctors, lawyers and accountants.

Re-imagines careers advice
Careers advice needs to be done in a different way. "How do you know what is out there?"

Humanises work and brings it to life in a relevant way

Green / Tech professionals and alumni Q&A
Industry professionals and high school alumni volunteer time to answer rangatahi questions online about their career and job.

Parent teacher interview tool
The parent/teacher interview tool facilitates new, up-to-date conversations about career and potential pathways for rangatahi. It connects whānau, teachers and students when they naturally come together.

Person + profession
Rangatahi can find professionals that have come from their world, or have similar interests, or a similar personality—making the support, information and advice come from someone they can relate to.

Inspiring career journey stories
A bit like Fibre Fale Tech Voyagers, short videos tell the story of how real life professionals ended up in their career

INSPIRATION

Career Village is a simple question and answer website where young people can ask a question of Professionals and get a response in real time.

Roadtrip Nation produces educational career content and experiences to support young people to find their pathway and pursue fulfilling careers.

Who is Miles Ahead for?

The people experiencing or 'using' and interacting with the idea.
NB. all ideas benefit rangatahi but they are not always direct 'users'

Rangatahi
Year 9-13 Māori & Pasifika rangatahi
who have access to the internet

Green / Tech professionals
(mainly) Māori & Pasifika professionals
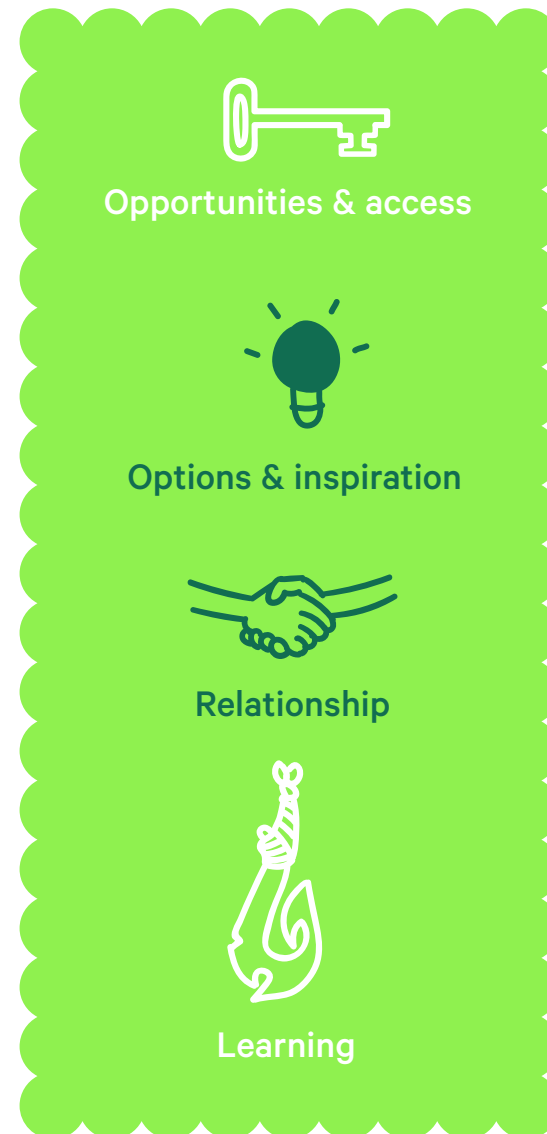working in green / tech / innovation

Whānau / Aiga

Knowledge gaps *things we need to prototype and test*

- How do we find and attract a diversity of professionals to participate?
- What would it look like at a parent/teacher interview?
- How do we attract whānau / aiga?
- How do we keep rangatahi safe online? Anonymity?

Need state
What needs does this idea address?

Opportunities & access

Options & inspiration

Relationship

Learning

Things needed to make it real

People / capability *who / what skills do we need on the team?*

Partners *what partners could support this idea? who has expressed interest?*

Policy *what policy is needed or could support this idea?*

Materials / resources

Ideas & builds
from our feedback sessions
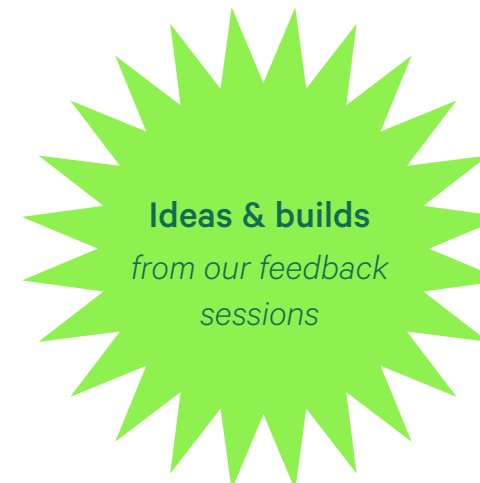
- A virtual reality platform
- Gamify it
- Make sure it's framed around questions and answers, not 'success stories' (otherwise just more of the same)
- Integrate with social media
- Could be used for upskilling and interview prep
- A 'cv' or portfolio review

Camp Utuutu

Camp Utuutu is an immersion experience run by kaumatua and rangatahi for STEM teachers. It supports teachers to learn about and experience other cultures and explore how they might apply it in the classroom.

It is a nurturing place of connection and belonging. Teachers discover their own identity and develop greater wisdom and empathy to take back to school and their relationships with rangatahi.

Utuutu: to nurse, take care of, nurture

WHY IS IT IMPORTANT?

Making STEM relevant

Rangatahi want to include culture in learning and express it within class, school and work.

Values Enua / Taiao

Rangatahi think high value careers empower themselves, the community and the taiao. Embedding these values in STEM help keep it relevant and motivating.
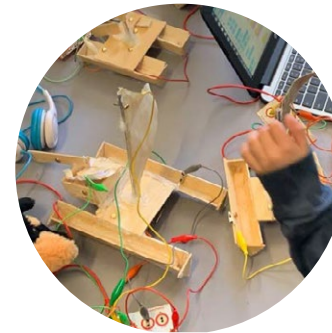
Rangatahi x Teachers Collab

Rangatahi and teachers collaborate to create cultural projects teachers can take back to the classroom.

Grounded in Enua / Taiao

Camp Utuutu helps teachers develop roots within the Enua/Taiao to better discover who they are. and have the intelligence and wisdom to educate rangatahi.

Change agents

Teachers report back on how they have integrated what they learned, feeding back on successes, challenges and sharing ideas.

Left: Kaikorai Primary School, Mātauranga Museum project from mātauranga.co.nz

Cultural support

Teachers have access to support after the event, ensuring that cultural knowledge is protected and not appropriated. They can ask questions to sense check and test their ideas and voice their challenges.

Cultural workshops and experiences

Teachers take part in workshops such as cultural history, arts and crafts, languages, as well as physical experiences like mau rakau / waka ama or diving for fish or learning dances and hakas.

INSPIRATION

Mahi a Atua supports (mainly) health professionals to become a 'Mataora' change agent with indigenous Māori strategies through workshops and wānanga across the motu.

Saltwater Fresh Alliance runs culture camps to inspire, empower and connect aboriginal young people.

Who is Camp Utuutu for?

The people experiencing or 'using' and interacting with the idea.
NB. all ideas benefit rangatahi but they are not always direct 'users'

STEM teachers
Teachers of science, technology, engineering and maths across the motu.

Māori & Pasifika rangatahi
Year 12 & 13 rangatahi interested and with an aptitude for STEM help run the camp and also collaborate with teachers to come up with new ways of presenting knowledge.

Knowledge gaps *things we need to prototype and test*

- How could this be funded? Ministry of Education? Training providers?
- Is this appealing to teachers?
- What would success look like and how would we measure it?
- Who would deliver this? Who has the capability to teach it?
- What does ongoing support look like?
- How do we address multiple cultures?

Need state
*What needs does this idea address?*
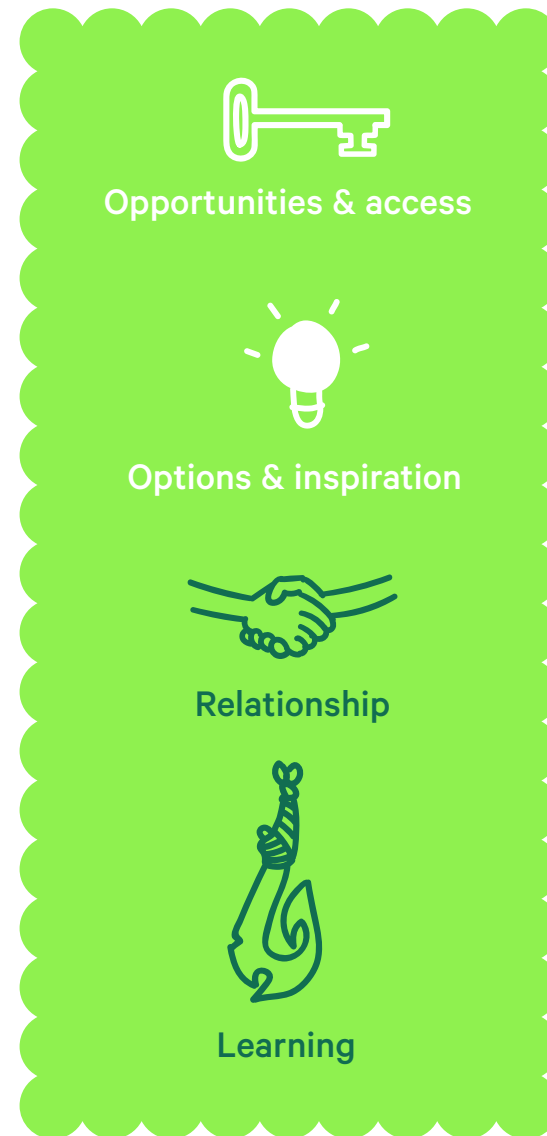
Opportunities & access

Options & inspiration

Relationship

Learning

Things needed to make it real

People / capability *who / what skills do we need on the team?*

Partners *what partners could support this idea? who has expressed interest?*

Policy *what policy is needed or could support this idea?*

Materials / resources

Ideas & builds
from our feedback sessions
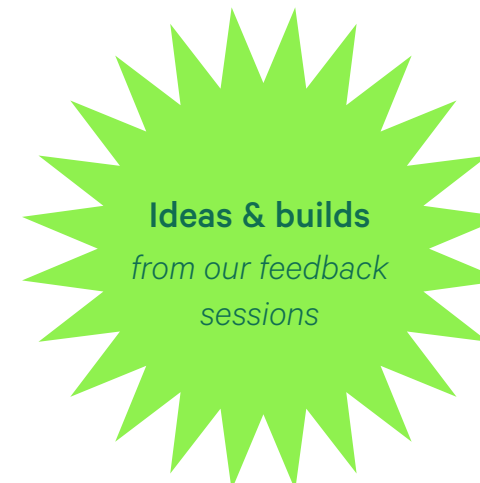
- Could this be delivered at teachers college? (professional learning and development can already feel overwhelming for teachers)
- Could there be a microcredential associated with it?
- Could there be partnerships with iwi who already do this?
- Maramataka could be the overarching tikanga
- Could this also be for employers, businesses, and parents?

Apoapo

Apoapo gathering space brings together employers, career advisors, career services and educators to pool and shape up internships, work experience and apprenticeships for rangatahi to get excited about in green / tech.

Apoapo: to collect, gather

WHY IS IT IMPORTANT?

Help & support for employers
Employers are time poor and need help presenting opportunities and connecting with rangatahi

Builds the relationship necessary to connect rangatahi to employers
Work experience takes time and dedicated effort for both companies and schools to make happen.

Exposes rangatahi to opportunities
South Auckland Schools are only being offered gateways at Bunnings/Mitre10 whereas schools based out Central and East Auckland are being offered gateways at companies like Jasmax.

Industry showcase
Apoapo showcases the latest pursuits by companies in an interactive, hands-on way appealing and fun for rangatahi.

Left: Wētā Unleashed creative workshop tour

Digital database
Apoapo is a one stop shop for green / tech opportunities. Schools, educators, employers and other service providers can all contribute to and access the database.

Opportunity navigator
Opportunity navigators help manage partnerships, agreements, funding and opportunities taking the pressure off stretched educators and employers.

VISION
Where agriculture gives back more than it takes

MODERN FARMING COMPANY

Place based & local
The physical spaces are located in close proximity to Māori and Pasifika communities. We want to target South Auckland in particular, where rangatahi have not had exposure to high value green / tech careers.

Opportunity & experience curators
Dedicated curators help employers shape up relevant, mana enhancing, learning opportunities for rangatahi
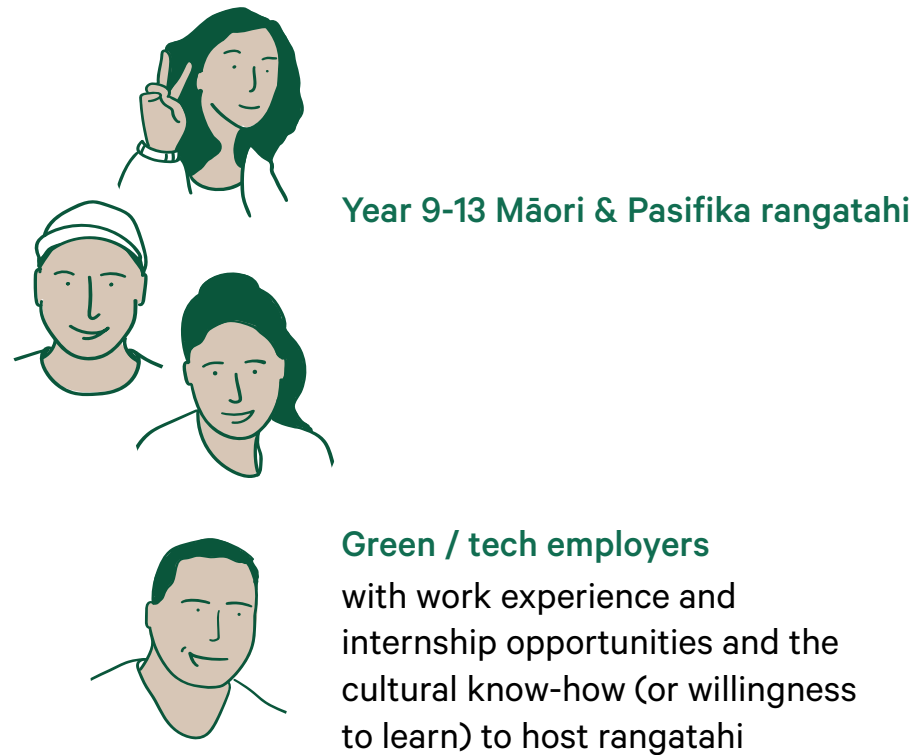
INSPIRATION
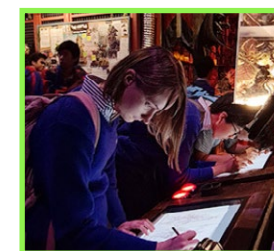
Wētā Workshop's inspiring experiences allow people to learn about special effects in a hands on interactive way. People can play with 'cool stuff' from their creative departments and see their artists at work.

PATCH neighbourhood workspaces' are dynamic work clubs and local community spaces allowing people to network, hold events, meet and work together.

Who is Apoapo for?

The people experiencing or 'using' and interacting with the idea.
NB. all ideas benefit rangatahi but they are not always direct 'users'

Year 9-13 Māori & Pasifika rangatahi

Green / tech employers
with work experience and internship opportunities and the cultural know-how (or willingness to learn) to host rangatahi

Knowledge gaps *things we need to prototype and test*

- What is the role of tertiary institutions?
- How does this scale?
- What does a good opportunity for rangatahi look like?
- How do we screen employers? What does a good employer look like, what conditions should they meet?
- How do we appeal to rangatahi and ensure this isn't a standard career expo?
- How do we ensure opportunities are followed through on and work for both parties?

## Need state
What needs does this idea address?
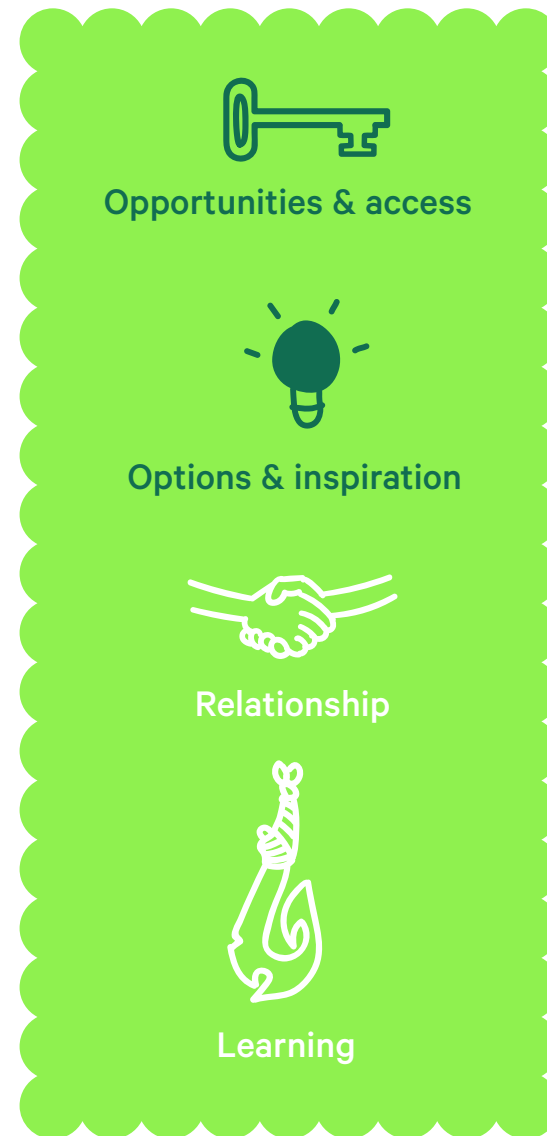
Opportunities & access

Options & inspiration

Relationship

Learning

Things needed to make it real

People / capability *who / what skills do we need on the team?*

Partners *what partners could support this idea? who has expressed interest?*

Policy *what policy is needed or could support this idea?*

Materials / resources

Ideas & builds
from our feedback sessions
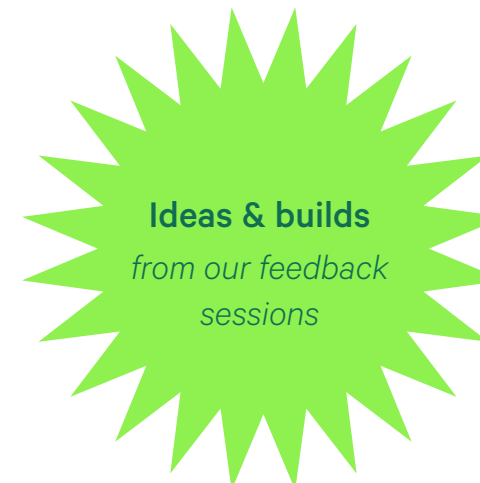
- Support employers to get the right employees to engage with rangatahi, share / teach them whanaungatanga if possible
- Rangatahi should meet employers at least in pairs
- Confidence building / personal development for rangatahi beforehand
- On-boarding for employers and rangatahi
- Age-appropriate preparation and activities (year 9/10 different to year 12/13)

Ako Anamata

Rather than subjects, students choose STEM-related, real world challenges.

Science, maths, engineering and technology and mātauranga are taught in a hands-on, practical way. Students have space to experiment, make and create and the opportunity to apply their learning in a real-world environment.

Ako Anamata: teaching, learning the future

WHY IS IT IMPORTANT?

Making STEM fun & relevant
It is engaging Māori and Pasifika rangatahi in learning that values their identity and engages them with maths, science, tech, arts by teaching these subjects in a different way and in a different space.

It allows them to work on projects that are real, relevant to the community and the taiao.

Future-focused, relevant skills
The links to industry and vocational tertiary careers mean the skills they are learning set them up for high value career pathways.

Space for playing & learning
Work benches, tools and materials and open plan give rangatahi the opportunity to make and create.

Students use their learning to solve real life challenges
Industry and educators collaborate to set challenges for rangatahi

Above: Project-based learning at High Tech High (California)

Paid work experience
Green and tech industry partners offer paid work experience to the students along with micro-credentials.

Knowledgeable trainers
Teachers are supported by STEM practitioners (both industry and tertiary students)

Above: Interdisciplinary and engineer staff members support students at SparkShop

INSPIRATION

Pūhoro STEM Academy is a kaupapa Māori programme for Māori high school students to support pathways to science, technology, engineering or mathematics careers.

SparkShop is a Chicago-based non-profit offerings in-school programmes that empower 4th and 5th graders to imagine their futures as engineers.

Who is Ako Anamata for?

The people experiencing or 'using' and interacting with the idea.
NB. all ideas benefit rangatahi but they are not always direct 'users'

Year 9-13 Rangatahi
Māori and Pasifika rangatahi with an interest in STEM and who would benefit from a hands-on way of learning.
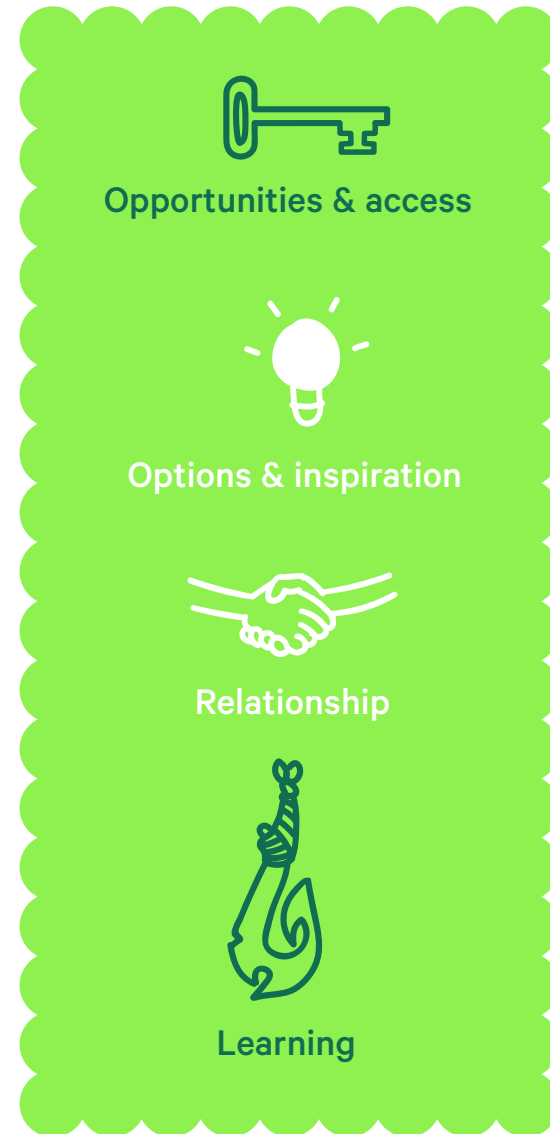
Employers
Forward thinking, pro-social green & tech employers who are willing to invest in their future workforce and also who would benefit from a rangatahi perspective.

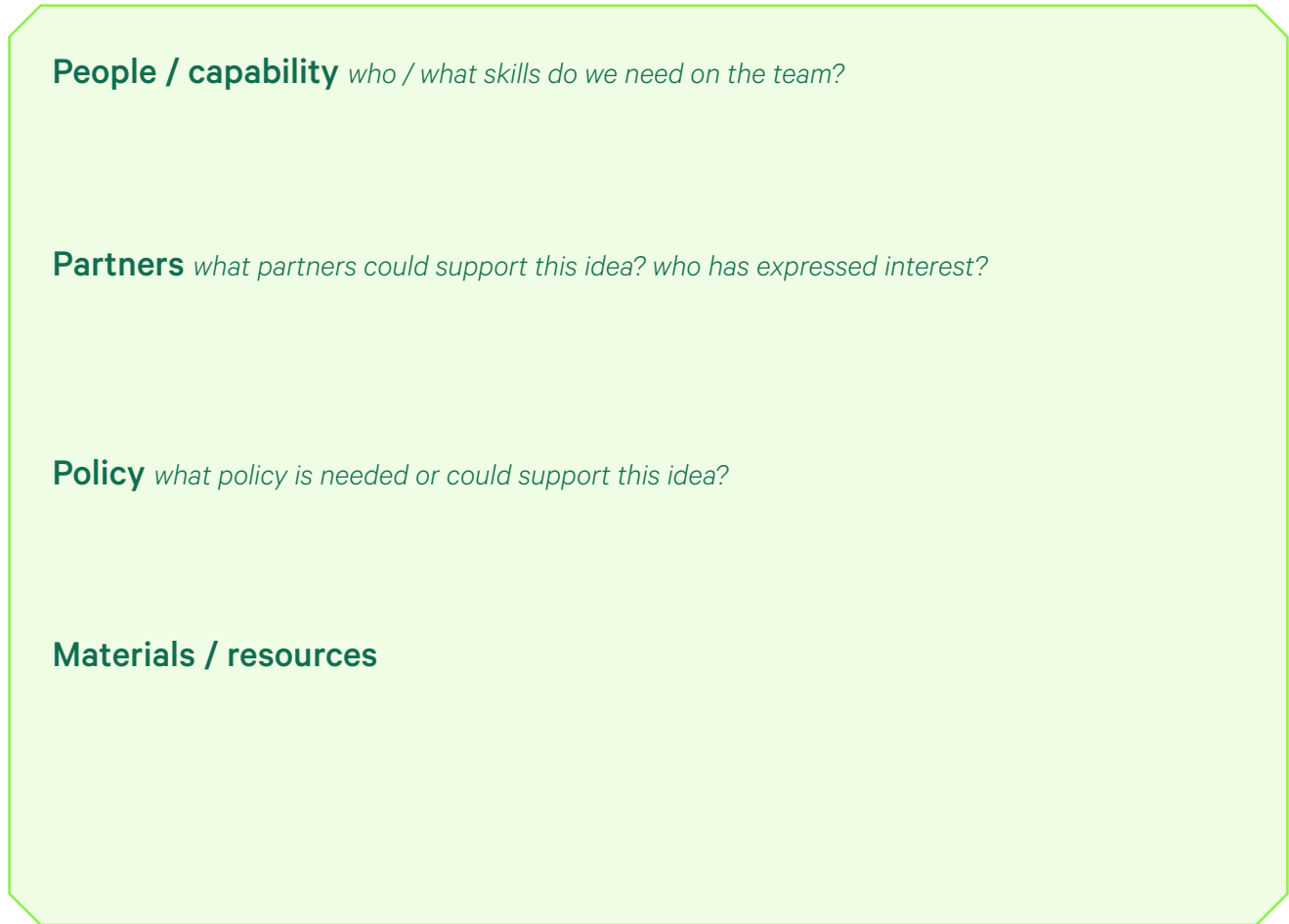## Knowledge gaps *things we need to prototype and test*

- Who will facilitate / learning in this way? Teacher training ?
- What does practical learning look like from the perspective of rangatahi?
- What is the perspective of teachers on this kind of learning? How might theory be integrated in this context?
- How do you ignite the Mauri? The curiosity? and encourage rangatahi to try things out

Need state
What needs does this idea address?

- Opportunities & access
- Options & inspiration
- Relationship
- Learning

Things needed to make it real

People / capability *who / what skills do we need on the team?*

Partners *what partners could support this idea? who has expressed interest?*

Policy *what policy is needed or could support this idea?*

Materials / resources

Ideas & builds
from our feedback sessions

- Get in early and start at primary school
- Curriculum could include section on employer/ entrepreneur research to find companies and mahi that aligns to career paths

Next steps & mihi

Join the mission

This document was designed to support kura, policy makers, employers, educators and other community initiatives to move closer to the mission of mana motuhake for Māori and Pasifika rangatahi through green tech jobs.

The ideas, concepts and principles are from rangatahi. They are at initial stages and we hope they will be adopted in some shape or form but if not, at least serve as inspiration to refine and amplify existing initiatives.

To keep in touch, find out more or adopt an idea please contact The Southern Initiative:

Anne-Marie
Anne-Marie.Mujica@aucklandcouncil.govt.nz

Sarah
Sarah.Sinnott@aucklandcouncil.govt.nz

Te Taiwhanga Rangatahi visit to Critical Design, green employer

"One improvement I have in mind is to actually go to the schools and do these sorts of workshops with them cause it will help."

"I know from experience that doing these sort of workshops, it brings out ideas for people and I guess from your guys group it will be beneficial."

"I loved this whole workshop. They're more like shaping the school system so it's more human than robotic. Even though we're moving with the times and robots are being created now, it's crazy but it's working."

Year 11-13 students feeding back to everyone at an idea testing workshop

Mihi

We are grateful to Te Taiwhanga Rangatahi '23:

Benny Abela
Jen Benjamin
Rereahu Collier
Matalena Fale
Ryan King
Alfa Lui
Lyquan Monga
J'vaan Toatoa;

The team at TSI:

Anne-Marie Mujica
Sarah Sinnott;

and the other rangatahi, tuākana and pākeke who have also supported this mahi.

We also thank the following organisations for their involvement and support in the development of Kura of the Future:

Manurewa High School
Manurewa High School Business Academy
Hugh Green Foundation
The Tindall Foundation
The Rising Foundation
Mau Studio
The Roots Creative Entrepreneurs
Te Pu-a-Nga Maara
Sustainable Business Network
Education Partnership Innovation Trust

Licensing

Kura of the Future: enabling mana motuhaki for rangatahi in a new green economy is licensed under a Creative Commons Attribution-NonCommercialShareAlike 4.0 International License.

The full text of this license is available here: https://creativecommons.org/licenses/by-nc-sa/4.0/.

The ideas and concepts within Kura of the Future are intended to be used and built on but please respect the mahi that has gone into these ideas by crediting this report and Te Taiwhanga Rangatahi.

Recommended credit:

Te Taiwhanga Rangatahi and The Southern Initiative, 2023 Kura of the Future: enabling mana motuhake for rangatahi in a green economy

If you would like to explore further please visit:

The Southern Initiative (TSI)
Auckland Co-Design Lab
The Attitude Gap A South Auckland Employment and Skills Challenge
Kia Mārama Mai A rangatahi, whānau and school perspective on supporting wellbeing
Youth in South A data overview of rangatahi in four South Auckland Local Board areas

For more information please contact:

Anne-Marie Mujica
Anne-Marie.Mujica@aucklandcouncil.govt.nz

Sarah Sinnott
Sarah.Sinnott@aucklandcouncil.govt.nz

Kuputaka

Enua – land (Cook Island Māori term)
Hoa haere – work buddy
Kuputaka – glossary
Kura – school
Mahi – work
Mātauranga – knowledge
Mihi – thanks
Pakeke – adult
Pūrakau – ancient stories
Pātai – question
Rangatahi – young people
Taiao – environment
Tohu – sign
Tuakana – mentor
Tikanga – correct procedure, custom,
habit, lore, method, manner, rule,
way, code, meaning, plan, practice,
convention, protocol