What are Pathways?
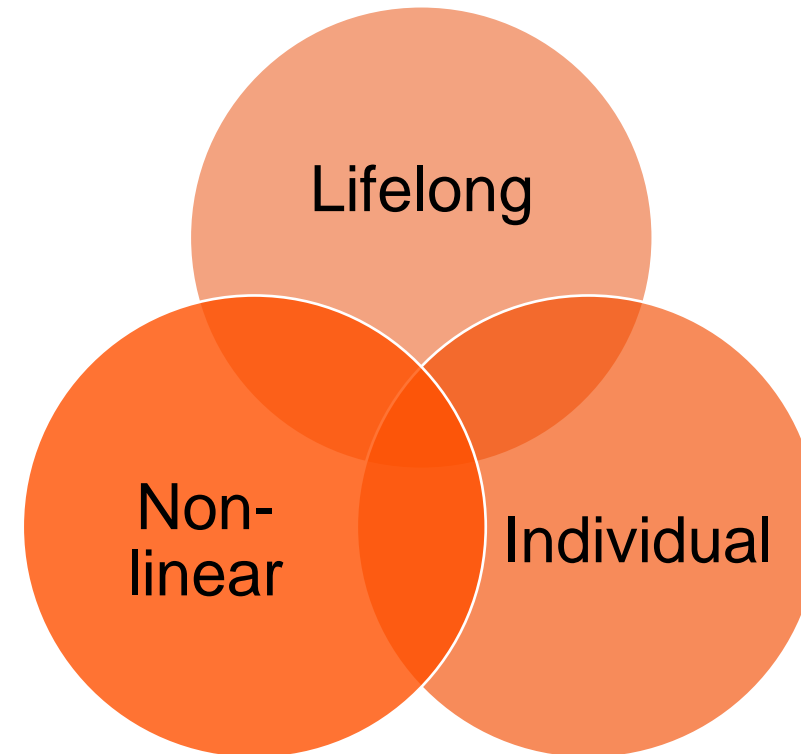
Every teacher can support ākonga to reach towards their chosen pathway. One that aligns to their aspirations and are meaningful to them and their whānau.

Everyone is on a pathway.

Pathways | NCEA (education.govt.nz)

Pathways are:

Pathways in Technology could include:

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- Trades E.g Apprenticeship
- Travelling holiday E.g Hospitality service industry
- Community Service E.g Habitat for Humanity
- Vocational Training E.g Vocational Education

- Toi Ohomai E.g Diploma in Software Development
- University E.g Spatial Design, Engineering
- Work E.g Data entry, Food Technologist
- Volunteering E.g St John

Why pathways?

Provides ākonga with purpose and direction

Prepares ākonga for a future we can't entirely predict.

Focuses on ākonga talents, needs, and aspirations

Young people want to increasingly define their own success

Identifies and strengthens what and how they learn

Who they want to be not what they want to do

Programme planning and pathways thinking

What knowledge do ākonga bring with them?

- Prior learning — *knowing ākonga*

What are ākonga going to do ?

- Learning journey — *co-constructed with ākonga and whānau*

What are ākonga aspirations and goals?

- Identify and implement next steps — *support ākonga to realise dreams*

Build pathways thinking into programme planning

- Connect with local iwi, employers, and community to exemplify diverse pathways in technology focussed pathways

- Connect with school Careers Advisors about technology pathways

- Help ākonga to identify their values, strengths, and passions

- Share your pathway journey, and invite others to share theirs

- Deliberately call out key competencies that relate to pathways in technology

- Profile Builder – Youth Guarantee (education.govt.nz)

What to think about for your students #1

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Teachable moments	Pathways is not a once-a-year activity, look for the teachable moments throughout the year.
Whānau and Community	Keep them informed Encourage involvement Share a termly Technology newsletter with whānau Invite community experts to share with classes Develop authentic contexts that serve whānau or community needs
Diversity and Inclusion	Create an inclusive and diverse learning environment Celebrate individuality Display information about a wide range of technologists working in varied fields — both usual and unexpected
Pathway Conversations	Foster open and non-judgemental conversations Regularly chat to ākonga about what they enjoy and where they would like to head after school

What to think about for your students #2

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Community Service	Community service and volunteering can help to develop a sense of purpose and empathy for others
Self-discovery	Encourage ākonga to identify and explore their interests, values and passions
Self-reflection	Encourage ākonga to reflect on their potential pathways What does success mean to ākonga on a personal level?
Extra- Curricular	Encourage ākonga to participate in activities that relate to their pathways e.g. clubs, competitions, internships
Role Models	Share pathway stories through guest speakers, biographies or documentaries
Celebrate effort and growth	Celebrate ākonga personal growth and achievements beyond academic or career successes
Goal Setting	Teach how to set SMART personal goals Revisit these goals repeatedly

What to think about for your students #3

Celebrate diverse interests	What truly interests and excites ākonga? Find out what really excites ākonga, where do their interests lie? Is it sustainability, gaming, sports? How can these passions be woven into their Technology projects? What could be their unique pathway?
Purpose	Encourage ākonga to find their purpose A sense of purpose can drive success
Celebrate effort and growth	What inspires ākonga to action and be engaged? Is it whānau, community, environment? How can this passion be embedded in their projects and fuel their learning?
Community Service	Encourage individual and group action. Is there a local organisation that needs support? eg, could ākonga run a school event, such as a clothes swap event?
Self-discovery	Spend some time creating dream boards — this helps ākonga to share their aspirations, and kaiako to know their students How To Make A Vision Board (milanote.com)

What to think about for your students #4

Portfolio	Encourage ākonga to collate a portfolio of their work — this could be personal or school-derived If ākonga are looking to study at tertiary '— what are the course recommendations for a portfolio?
Self-reflection	Encourage ākonga to explore what pathways success means to them — is it financial stability, professional achievements, fulfilling personal life, making a positive impact on the world? How can this be connected to their learning in Technology?
Extra- Curricular	Promote competitions such as those offered by the Technology subject associations: TENZ, DTTA, HETTANZ, NZGTTA
Role Models	Invite subject relevant speakers into class to talk about their pathway journey Visit local businesses Watch or recommend documentaries and biographies about technologists
Celebrate effort and growth	Recognise and celebrate success — this could be when ākonga research and learn about a new material or skill, improve understanding about ethical considerations, or persevere to reach the end of a challenging task or project

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What to think about for an unknown future

Creativity and innovation	Career exploration and adaptability	Cultural competency	Critical thinking and problem solving	Environmental and sustainability awareness	Community awareness	Civic responsibility
Digital literacy	Adaptability and resilience	Global awareness	Ethical decision making	Soft skills	Data literacy and information management	Life-long learning

- Employability Skills Framework — Youth Guarantee (education.govt.nz)
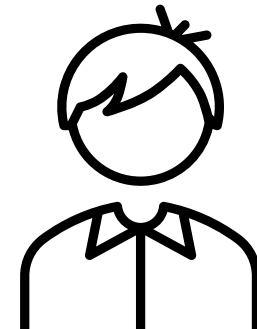- Connections Between Subjects and Career Pathways | NCEA (education.govt.nz)

An unknown future - resources

- [New book explores how schools can prepare students for an uncertain future | The University of Kansas (ku.edu)](#)

- [Preparing Students for Their Uncertain Futures (govtech.com)](#)

- [Educating, preparing and empowering students for an unknown future (interfaceonline.co.nz)](#)

- [Preparing students for their futures | National Library of New Zealand (natlib.govt.nz)](#)

- [E2030 Position Paper (05.04.2018).pdf (oecd.org)](#)

- [OECD Learning Compass 2030 (oecd.org)](#)

Learning Area ākonga profile

- For each subject offered in the Technology Learning Area, what does each ākonga need to know, understand and do by the end of the year for their themselves, whānau, or community?

- How does what each ākonga need to know, understand and do by the end of the year for their school, whānau, community link to the Technology Curriculum?

- How does what each ākonga need to know, understand and do by the end of the year for their school, whānau, community link to the curriculum and assessment changes?

- How does what each ākonga need to know, understand and do by the end of the year for their school, whānau, community link to ākonga well-being, vocational pathways, employability and citizenship?

Pathways in Design and Visual Communication

- Design and Visual Communication can provide students with a strong foundation for a variety of career paths and learning opportunities. By taking Design and Visual Communication they will develop the necessary skills to bring their own ideas about spatial and product design forward through visual communication.

- These skills, such as drawing, drafting, and design thinking, can be applied in fields such as construction, engineering, interior design, landscape design, architecture, and urban planning.

- Additionally, students may use these skills to pursue careers in marketing, surveying, product design, web design, the fashion industry, fine arts, or visual media.

- Students of Design and Visual Communication will benefit from learning skills that will support them in later life by enabling them to communicate their ideas through visual representations.

- By completing Level 1 Design and Visual Communication, students will have the skills needed to continue to Level 2, or pursue a cadetship or apprenticeship. This subject can also serve as a stepping-stone for further study in a related field.

Pathways in Digital Technologies

- Ākonga studying Digital Technologies will gain knowledge, skills, and values which are useful in all facets of life, whether at home, in the community or in employment.

- Digital Technologies encourages creativity and critical thinking, and builds technical skills that will empower ākonga throughout their life beyond school. Digital Technologies sets ākonga up for pathways into many different fields. They range from developing information and communication technologies to working in the area of arts and entertainment, and from providing digital solutions for issues facing our world to helping people carry out daily tasks.

- People are at the heart of digital technologies. Ākonga will be encouraged to understand the diverse needs and perspectives of the users they are creating digital solutions for. Ākonga will also develop their understanding of ethical considerations, which are increasingly important as technology pushes the boundaries of what is possible. As individuals, understanding the power of digital technologies enables ākonga to participate in a digital society in a safe and informed manner, and potentially to become digital innovators themselves.

Pathways in Materials and Processing Technology

- Materials and Processing Technology is an exciting, innovative, and creative subject where skills and knowledge are woven together to provide ākonga with transferable skills that can be applied to every aspect of their lives. Ākonga will engage meaningfully in the subject to help them become who they want to be, providing space to explore their interests and aspirations, and discover new ones.

- Ākonga wishing to continue their Materials and Processing Technology journey will leave school with a solid foundation of technological literacy. They will be on the road to mastery through knowledge and understanding of materials and practices. This combination of practical skills and theoretical knowledge can lead ākonga to work experience, apprenticeships, and even the chance to set up their own businesses, as well as further education.

- Engaging in Materials and Processing Technology equips ākonga with skills that can be of considerable advantage to any career. In Materials and Processing Technology, ākonga will learn to push boundaries and take risks by testing their practical skills in authentic contexts. Ākonga will develop critical thinking skills by experimenting with materials, exploring, and collaborating with others to make informed decisions. Ākonga of Materials and Processing Technology will be able to apply their convergent, divergent, creative, and analytical thinking to any aspect of life, to understand reasoning, and to use logical processes.

Pathways in Materials and Processing Technology

- Regardless of where life may lead, Materials and Processing Technology teaches ākonga to be both disrupters of processes, and resilient and adaptable to disruption. Ākonga will be able to develop their lateral thinking skills to innovatively solve problems. They will learn to be considerate of others and able to see potential in situations to create unexpected but fit-for-purpose outcomes. Ākonga will learn to question both processes and their own assumptions, critiquing whether the way something has always been done is truly the best way forward.

- In an increasingly globalised world, Materials and Processing Technology enhances ākonga cultural understanding and navigation. The experiential nature of the subject allows learners to develop tacit knowledge to do things that can't be explained in words. By demonstrating thinking through tangible practices, ākonga will not be restricted by language, allowing them to break down communication barriers to work with a wide range of people, both in Aotearoa New Zealand and around the world. They will be equipped to work with a diverse range of people as they are open minded and able to explore issues from multiple perspectives. These are all highly desirable traits recognised by whānau, the community, further education, and employers that will enable ākonga to become high functioning members in Aotearoa New Zealand society.
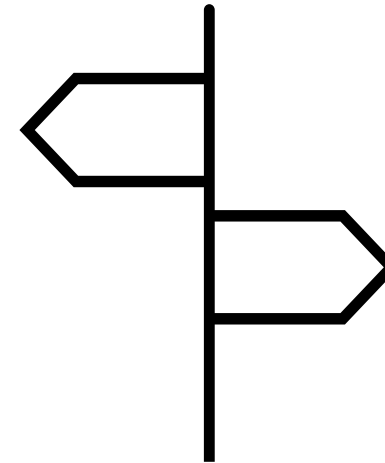
Where to?

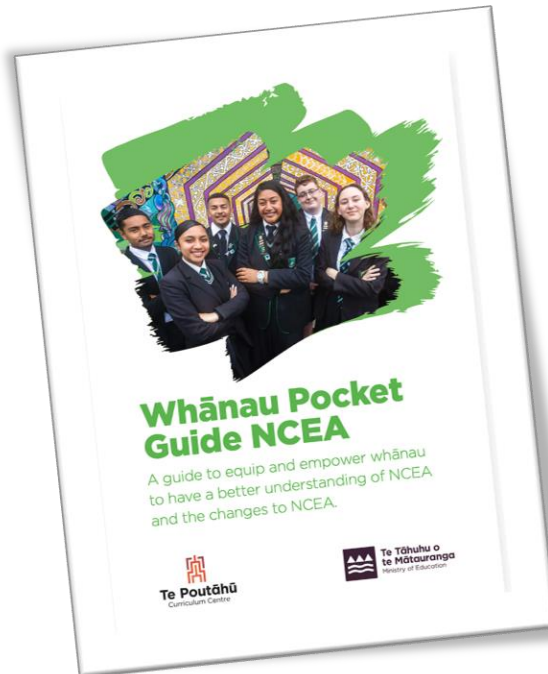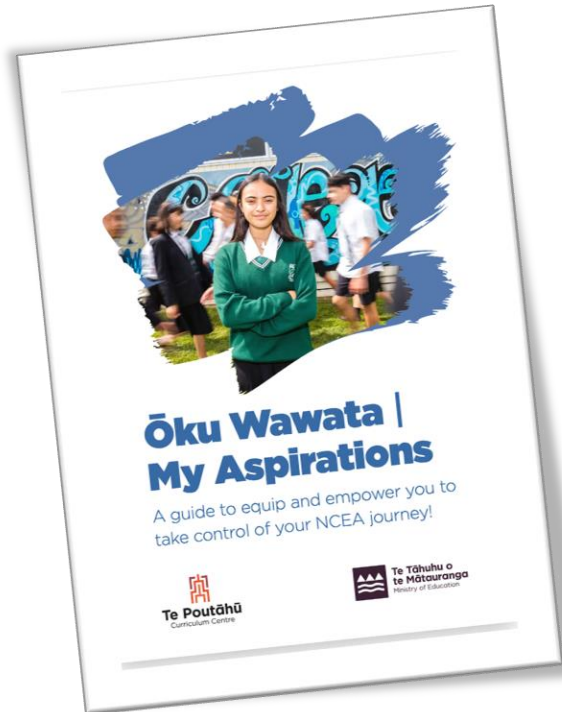Ministry of Education 'Where to?' wall posters

Where to? Mechanical Technologies

Where to? Processing and Construction

Where to? Digital Technologies

Where to? Design and Visual Communication

How can you support whānau to support ākonga?

Further Information:

Revised ākonga and whānau guides are now available, these can be shared with ākonga and whānau through newsletters or during whānau conversations.

- Ōku Wawata | My aspirations guide
- Whanau Pocket Guide

Supporting ākonga and whānau | NCEA (education.govt.nz)

Te Poutāhū
Curriculum Centre | Te Mahau

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He mea **tārai** e mātou te **mātauranga** kia **rangatira** ai, kia **mana taurite** ai ōna **huanga**

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Te Tāhuhu o te Mātauranga
Ministry of Education

Te Kāwanatanga o Aotearoa
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