Navigating technology transitions

A guide and toolkit for kaiako





He mihi | Acknowledgements

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Grow Waitaha is dedicated to future-focused pedagogy and innovation in our kura. Pathways are an important aspect of this – supporting a connected, collaborative, coherent, and learnercentred schooling system is a key focus.

The adjustments and adaptation involved with transitions can be challenging. Strengthening pathways includes enabling seamless transitions as ākonga progress through kura and year levels.

Grow Waitaha is a multi-year project to support schools in post-earthquake greater Christchurch through citywide educational transformation. We want to express our gratitude to the kaimahi and ākonga from Maukatere Centre for the photography used in this resource. We also acknowledge the contributions of the Grow Waitaha Storytelling team.

We welcome feedback and your ideas for navigating technology transitions. For feedback and suggestions please email:

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He whakamahuki | About this guide

One important learning area to consider in seamless transitions is technology and the technology curriculum.

Recognising the multifaceted challenges of technology learning, this toolkit is designed to support schools and kura to evaluate how they connect their technology curriculum provisions across schools and technology providers, and enable a more efficient progression of learning.

This toolkit is presented in **four sections** that support you to assess your technology transitions in simple terms and take steps towards strengthening connections with other technology providers.

School technology staff and senior leadership can use this guide to facilitate conversations and start planning for deliberate, effective transitions.

OBJECTIVES OF THE TOOLKIT:

- + Understand the challenges of transitions in technology learning.
- + Foster relationships between professionals and students.
- + Empower the voices of students and teachers.
- + Bridge gaps in technology teaching and learning.
- + Cultivate leadership and agency.
- + Ease transition challenges.

This toolkit is presented in four sections:



PART 1: The challenges



PART 2: Transition planning



PART 3: Creating a curriculum alignment framework



PART 4: Self-assessment and feedback



The challenges

The technology curriculum encompasses a high degree of creation. While technology is often considered in terms of physical projects for ākonga, it also includes digital and process oriented outcomes.

This guide does not focus on a single area of technology, but more the concept of creation and outcomes, whatever form they take, for example, a pencil case, fashion design, creating a working computer programme, visual presentation.

Kura are increasingly looking for technology opportunities that engage ākonga and help them to create things that excite and interest them, and to connect these projects to economics and business studies so that students learn to design, market, and sell desirable creations. This can make cohesive school transitions, and transitions between year levels, departments, and teachers quite challenging. Inconsistent teaching and learning is a significant challenge because intermediate and secondary schools often receive ākonga from a number of different feeder schools.







Ensuring that learning outcomes flow from one year to the next, even when moving between schools is a challenge. When there is a disconnect between curriculum content and expected competencies ākonga may be unprepared for the complexity of projects and concepts at a higher level, or overprepared and unchallenged.

Incomplete projects and learning experiences

In technology education, ākonga often engage in projects and experiences that span multiple weeks or months. These require ongoing planning, creation, and refinement. Transitions between years or schools can disrupt projects or interrupt important learning experiences.

Disconnect between departments

There can be a marked separation between different departments or areas of study, including technology. This can lead to a fragmented approach to teaching technology, where the interdisciplinary potential of technology education is not fully realised, and students miss out on understanding its application accross contexts.

Variability in teacher expertise and resources

Teacher expertise, teaching styles, and available resources can vary widely across schools and year levels. This variability can result in inconsistent learning experiences and achievements in technology, making it more difficult to ensure a coherent, connected educational pathway.

Adapting to rapid technological changes

The technology curriculum and projects need to continually adapt to rapidly changing technology and changes in society. Keeping the curriculum current and relevant is challenging and may make transitions between schools more difficult as new technology is adopted at different rates.

Student engagement and motivation

Maintaining engagement and motivation through transitions is difficult, especially if students do not see the practical applications of what they are learning or if there is a perceived lack of relevance to their interests or future aspirations. Catering to students' interest areas and career aspirations across technology areas and schools helps to keep students engaged and aligned with their personal goals.



Identifying the issues

Assessment and feedback

Varied assessment practices and feedback mechanisms can impact how students perceive their progress and achievements in technology. Assessment and feedback are essential parts of the learning process and need to be maintained across technology disciplines and transitions between year levels and schools. Students may be adapting to new expectations and challenges, so teachers need to carefully manage how transitioning students are assessed and how feedback is used to refine their knowledge and practice.

Addressing these challenges requires a concerted effort from educators and administrators. Transition programmes, enhanced communication between schools and departments, and investment in professional development for kaiako are all essential considerations for technology transitions.

Where possible, students need to be engaged in meaningful, interdisciplinary projects and their learning needs to carry over the transition to another year level or a new school.

The purpose this toolkit is to provide practice advice for transitions between schools. for example, as students move from year 6 to year 7, or year 8 to year 9.





PART 2: Transition planning

This guide is designed to facilitate smooth transitions between schools for students in technology education, and to support kura to navigate the challenges and opportunities associated with student transitions in the technology curriculum.

The particular focus is on enhancing continuity and progression in technology learning.

This tracking template is a sample of information that can be usefully shared between schools and year levels to indicate which parts of the technology curriculum ākonga have covered.









Use and adapt these ideas and suggestions to create a sequenced plan for supporting technology transitions in your setting.



Pre-transition preparation

For leaving school:

Information sharing: Students compile comprehensive portfolios that include their achievements, projects, and skills in technology education. This may include any specific interests or strengths that the receiving school may find useful or be able to further support.

Facilitate transition meeting: Allow students the opportunity to see their next school, including the technology department and learning opportunities. This should be done with time to allow students to consider their next steps in technology.

Resource handover: Provide students with any resources or materials that they can bring to their new school to aid in their learning continuity. Students take workbooks and portfolios with them to track their technology learning progress.

For receiving school:

Welcome pack: Prepare a welcome pack for incoming students that includes an overview of the technology curriculum, available resources, and extracurricular opportunities related to technology.

Portfolio continuity: Schools may decide to provide opportunities for students to further explore their portfolios or past experiences. This may involve using maker spaces or general technology areas. Teachers may provide more individualised support to determine what a student is interested in and help them expand the portfolio they started at their previous school. 2.

During transition

Orientation: An orientation programme is a useful for helping students adjust to a new school, environment, and teaching and learning expectations. A technology-specific orientation may outline learning opportunities, the technology curriculum, resources, and extracurricular opportunities available to students.

Buddies: Similarly, students working on projects may be paired with students who have less direction to help acclimate them to technology project-based work, the new school environment, and the resources available for project work.

Curriculum alignment: Assess the current knowledge and capabilities of students entering the school and where their skills and previous learning align with the school's technology curriculum. This will ensure they are appropriately positioned for new learning that continues from their current level, and support those with limited technology exposure to catch up with their peers.







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Post-transition support

Ongoing follow-ups: Follow-up meetings or regular check-ins with students will allow teachers to better understand and address challenges and gauge the students' adjustment to the new curriculum.

Learning plans: Personalised plans and goalsetting may be useful to address existing gaps in knowledge and skills, ensuring that students can catch up without feeling overwhelmed.

Integration into projects: Actively integrate the student into ongoing or new technology projects, emphasising collaboration and peer learning. This may be group learning, class-wide, or school-wide collaborative projects.

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Monitoring and evaluation

Regular assessment: Implement regular assessments to monitor student progress in technology education and adjust learning plans as needed.

Feedback mechanism: Create ways for students to share their learning experiences and the challenges they face, allowing time for interventions.



PART 3:

Creating a curriculum alignment framework

Alignment or continuity frameworks created by kura allow kaiako to deliberately plan for progression of learning through different stages of technology education. They should aim to bridge gaps between year levels and between schools, building upon student's existing knowledge and skill.





Using the curriculum to inform learning



Use and adapt these ideas and suggestions to create a framework that aligns teaching and learning with the curriculum.



Curriculum mapping

A curriculum map should represent the scope and sequence of the technology curriculum across year levels and schools, identifying key learning outcomes, skills, and knowledge areas.

Curriculum maps highlight the knowledge and skills expected at each level, how concepts are developed and expanded at each stage, and should be flexible to allow for new technologies and advancements.

<u>This table</u> is an example of how a curriculum map can illustrate and guide how successive knowledge and skills are built across multiple years.

The refreshed technology curriculum is scheduled for publication in 2026/27, however, kaiako can use the existing curriculum to establish clear learning progressions for key technology concepts, practices, and thinking skills. This article on Tāhūrangi outlines the current achievement objectives and indicators in the technology learning area: <u>Characteristics of</u> <u>technology indicators of progression</u>



2.

Transition support activities

The purpose of transition support activities is to support students during key transition points, such as moving from primary to intermediate, and intermediate to secondary education.

Transition units or projects should recap essential prior knowledge (identified in the curriculum map) and introduce the next key concepts for the next level. Bridge programmes and other activities can provide hands-on experience to reinforce past learning and introduce future content.



3.

Using the curriculum to inform learning



Professional development for kaiako

Support teaching staff to effectively deliver a vertically aligned curriculum. Ongoing professional development and inquiry is essential to allow support kaiako to develop their skills and strategies for technology teaching.





Feedback and adjustment mechanisms

Prioritise ongoing feedback and adjustment to ensure the curriculum remains relevant and maintains vertical alignment. This may include feedback loops with students, other teachers, and parents to gather insights into the curriculum's strengths and areas for improvement.

Data from assessments, project outcomes, and feedback can all be used to inform curriculum adjustments and plan for future transition supports.



Collaborative planning

Prioritise and support collaboration between teaching staff, allowing them to plan integrated and progressive learning experiences. This includes collaboration between schools (e.g. between intermediate and secondary school) and between departments (e.g. to facilitate multidisciplinary projects).

Support kaiako to share resources, lesson plans, student work, and past portfolios. Cross-team teaching and project mentoring provide students with expertise and perspectives from different teachers.

Prioritise ongoing feedback and adjustment to ensure the curriculum remains relevant and maintains vertical alignment. This may include feedback loops with students, other teachers, and parents to gather insights into the curriculum's strengths and areas for improvement.

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PART 4:

Self-assessment and feedback

Effectively facilitating technology transitions is not a perfect or easy process. Various methods of assessment are essential to ensuring long-term success of technology transitions and making necessary adjustments to improve continuity and seamlessness.



PART 4: SELF-ASSESSMENT AND FEEDBACK

Understanding and strengthening technology Iearning and transitions



Use and adapt these ideas and suggestions to self-assess the strengths and challenges in your setting, and guide the process of change.



Establish clear objectives and standards

Purpose

To set clear goals for what your technology programme(s) aims to achieve in terms of student learning outcomes, progression, curriculum relevance, and pedagogical effectiveness.

Implementation

Develop a list of objectives and standards based on the technology department, the school-wide annual and strategic objectives, and the specific needs of the student population and community.

Objectives cover curriculum content, teaching methodologies, technology integration, and student engagement. Establish clear goals for progression in technology and how the curriculum is vertically integrated.

In some cases, specific technology department objectives may be included in the school's annual objectives provided there are adequate success or reporting measures.



Establish data collection and reporting mechanisms

Purpose

To provide Information on the current state of the technology programme, including the strengths and areas for improvement, that can be used for reporting purposes, including keeping the school and technology departments accountable for effective transitions.

Implementation

Create surveys and questionnaires for students, teachers, and parents to provide feedback on the curriculum, teaching methods, and learning resources. Questionnaires should capture how well transitions are occurring, including whether prior knowledge and skill are being built upon.

Conduct classroom observations from teaching staff to assess student engagement and learning outcomes.

Student work analysis involves reviewing student projects, learning outcomes and assessments to evaluate knowledge and skill development over time.

Professional development activities can assist teachers in self-assessment and refinement of their teaching and learning strategies, as well as their effectiveness in enabling seamless transitions. PART 4: SELF-ASSESSMENT AND FEEDBACK

Understanding and strengthening technology learning and transitions



Analysis of data and identification of needs

Purpose

3.

To critically assess the data and identify specific areas where the technology programme and transitions can be improved.

Implementation

Ensure there is time to collaboratively review the collected data. Focus on:

- + analysing feedback from all stakeholders
- evaluating the alignment between curriculum objectives and student outcomes
- evaluating the vertical alignment of the technology curriculum and transition effectiveness
- + identifying trends, challenges, and opportunities for growth.



Develop an action plan

Purpose

To outline specific steps for addressing identified areas for improvement and enhancing the overall quality of the technology department and related programmes.

Implementation

Staff should use the data to formalise an action plan for subsequent years. This is an iterative process to gradually improve technology transitions and learning outcomes.

The action plan should identify targeted goals, strategies/resources required, proposed timelines, and responsibilities of department members.



Implement changes and monitor progress

Purpose

To put the action plan into practice and continuously monitor its effectiveness in improving technology education provision and student transitions.

Implementation

Put into practice the strategies formalised in the action plan with regular check-ins to assess progress toward strategic goals and make adjustments as necessary based on ongoing feedback and changing needs.

Evaluation and reflection is essential to assess the impact of the action plan and refine the process for further improvement. This will require ongoing data collection, continuous reflection and refinement, and celebrating the successes of the programme and transition efforts with staff, students, and families.

Hei whakakapi | Final thoughts

This guide is not a "to-do" list, but we hope our suggestions might inspire you to try something different.



Space for your reflection

- + One thing I can do today to get started in my setting is...
- + What's working well and what do we need to change? How do we know?
- + What actions do we need to take?
- + How will this guide support change in our kura?
- + What could we explore further?

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Tō pitomata, He rua kanapū wehi ana.

Your potential is something to behold, like lightning that lights up the skies."

Useful links and further reading





<u>Grow Waitaha Tracking Template</u> (PDF 167 KB) →

Grow Waitaha Curriculum Mapping Template (PDF 99 KB) →

Planning guide for Technology Transitions Te Aratohu Whakarite mō te Whitinga Hangarau (PDF 286 KB) →

<u>Amplifying ākonga voice - year 9 technology students' experience of transitioning to</u> <u>secondary school - Grow Waitaha</u> \rightarrow

<u>Technology in the New Zealand Curriculum</u> \rightarrow

Whakapā mai | Get in touch

We welcome ongoing feedback on how you have used this resource and what suggestions you would like to contribute. Please email:

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