



Briefing Note: Implementation of Digital Technologies and Hangarau Matihiko curriculum content for 2020 and beyond

To:	Hon. Chris Hipkins, Minister of Education		
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Purpose of Report

This paper provides you with an update of the current implementation of Digital Technologies and Hangarau Matihiko (DT&HM) content into the national curriculum and how schools and kura will be supported in 2020 and beyond.

Summary

1. New Zealand's education system continues to adapt in this digital world. Digital technologies are altering the future of work, how we engage with all facets of society and the skills that are needed. For those reasons the DT&HM curriculum content was introduced into the national curriculum in term 4, 2017 and will be expected from February, 2020 to be taught in all schools and kura.
2. The remaining funding (from the original \$38 million support package) will be centred on a shift in focus to targeted support at those schools and kura currently understood as unengaged. This
3. Evaluation reports from the Education Review Office (ERO) and third party providers tell us that while schools and kura are at different stages, most have begun their implementation and we need to continue to support the momentum of this change by maintaining targeted support in 2020.

Recommended Actions

The Ministry of Education recommends you:

- a. **note** that the new Digital Technologies & Hangarau Matihiko (DT&HM) is now expected to be taught in all schools and kura.

Noted

- b. **note** that many schools and kura are implementing this into their teaching and learning programmes.

Noted

- c. **note** that the supports, continue to be offered in 2020, with a focus on targeting support to those schools and kura with the highest implementation needs.

Noted

- d. **Proactively release** this briefing.


Ellen MacGregor-Reid
Deputy Secretary
Early Learning and Student Achievement

3/12/20


Hon. Chris Hipkins
Minister of Education

3/3/20

Agree / Disagree

Background

1. As constant technological change impacts society, in 2014 the Ministry agreed to review the position of digital technologies in the national curriculum as part of the Government Science and Society Strategic Plan "A Nation of Curious Minds: Te Whenua Hihiri i te Mahara."¹
2. As a result of the review in 2016 it was announced that digital technologies learning would be strengthened in *The New Zealand Curriculum* and *Te Marautanga o Aotearoa*.
3. In 2017 the new curriculum content was introduced and now from 2020 it is expected that all schools and kura will implement the new content.
4. While many schools and kura have gained increasing confidence with the new curriculum content, it has been a shift for others. We need to share the progress that has been made by early adopter schools so that other schools and kura can learn from this. Tailored support and guidance will still be required by schools and kura in 2020. A case studies evaluation report on the digital technologies implementation was released on the 23 January 2020 by the Education Review Office (ERO): *On your marks...get set...go! A tale of six schools and the digital technologies curriculum content*.

The Capability to teach Digital Technologies & Hangarau Matihiko curriculum content in schools and kura

5. The new curriculum content isn't about teaching students to use digital devices but rather about developing digital-capable thinkers and allowing students to understand the computer science principles that drive digital technologies and innovation.
6. In a system where the DT&HM curriculum content is well embedded we would expect to see all teachers and kaiako confident and capable of teaching DT&HM as part of integrated teaching and learning programmes. There would be a strong focus on progress across the full pathway, integration with other areas of learning, and students, whanau and iwi would understand and support the value of this learning.
7. When the Government gazetted the DT & HM curriculum content in December 2017, the expectation was that by 2020:
 - a. schools and kura will have incorporated the DT or HM components of the Technology Learning Area or Hangarau Wāhanga Ako in their local curriculum or marau ā-kura.
 - b. teachers and kaiako will know how to teach the new content.

¹ A Nation of Curious Minds: Te Whenua Hihiri i te Mahara is a joint plan that was launched in July 2014 between the Ministry of Education, Ministry of Business, Innovation and Employment, and the Office of the Prime Minister's Chief Science Advisor.

8. Evaluations commissioned by the Ministry and carried out by the Education Review Office (ERO) for the *New Zealand Curriculum* and Te Paetawhiti for *Te Marautanga o Aotearoa*, together with reports from the support package contract providers² have given us insights on the effectiveness of the implementation strategies and supports. This information has also provided insights into what barriers and enablers have influenced school and kura preparation for implementation, and their readiness to deliver the new content from 2020.
9. These evaluations and feedback from the ministry's regional offices suggest that schools and kura have begun implementation, and further momentum is required to sustain and embed the change. Although the majority of schools and kura are aware of the change, they are at different stages in changing their programmes and practices. Uptake of the support package continues to rise to support them with this change.
10. Kura will also continue to need support with the revised Hangarau Wāhanga Ako and the significant amount of new reo to be learnt to be able to teach the new content.

Continued support for the DT & HM implementation in the national curriculum

11. Our implementation plan for 2020 is centred on a shift in focus to targeted support for those schools and kura currently understood as unengaged. This approach is based on regional analysis of school and kura engagement and needs. Up until this point, schools and kura have self-selected into the preferred programmes as they feel appropriate.
12. Ministry staff members that have relationships with the schools and kura will lead contact with these schools. We will be able to match the appropriate professional support available to the needs of the school or kura. This targeted contact will be a focus for the Ministry's regional offices throughout 2020. We will monitor this approach and the demand closely, and adjust our approach where necessary.

Specific implementation supports

- a. Continue the following programmes from the package of supports;
 - Kia Takatū ā-Matihiko National | Digital Readiness Programme
 - Tahi Rua Toru Tech! NZ's Digital Challenge
 - Digital Technology for All Equity Fund – Digital Ignition and Raranga Matihiko
 - Digital Technologies and Hangarau Matihiko Online for NCEA
- b. These programmes will be revised to focus on face to face professional learning and development for teachers. No further resource development is needed as we have sufficient print and digital resources to meet the diverse needs of the sector. This means we can direct all funds to in-school support.
- c. Supporting curriculum implementation through the promotion of a new Digital Technologies *Implementation Support Tool* for schools in January. This tool details the steps of implementation from not yet started through to leading and innovating. This tool has been developed using the implementation practice exemplified in ERO's case studies evaluation report from a range of schools. This tool is being

² ERO: *It's early days for the new Digital Technologies curriculum content*, July 2019.; Te Paetawhiti Ltd: *Early implementation of the strengthened Hangarau Matihiko curriculum content*, December 2018; Cognition Education: *Teacher evaluation of Digital Technologies and Hangarau Matihiko support resources*, June 2019.

implemented by: ERO, the Ministry's regional offices, PLD providers and facilitators and all the other DT&HM programmes continuing in 2020.

- d. Plans are in place to develop a similar tool for kura to be released in 2020.
- e. Supporting capability building with the new resource *Leading local curriculum design in the revised technology learning area*. This guide joins the series focussed on local curriculum which were published in early 2019 by the Ministry.
- f. Migrate the resources developed by our DT&HM support providers into a kete on Te Kete Ipurangi and Kauwhata Reo so that schools can self-access when they are ready. The implementation tool and local curriculum guide complement this kete of resources.
- g. Strengthening support for local curriculum development will be available as a national Professional Learning and Development (PLD) priority in 2020 to schools. Additionally, digital fluency remains a PLD priority.
- h. Encouraging schools and kura to look for opportunities to build partnerships with technology businesses that can provide both teachers and children with learning experiences. One way schools and kura can do this is to get involved and enter the *Tahi, Rua, Toru, Tech* Challenge, which provides young people access to fun learning experiences and industry contacts.
- i. Activating technology networks of expertise and subject associations groups to ensure that their personalized support targets those schools and kura with the highest implementation needs.
- j. Continuing to collaborate with our key stakeholders on the impacts of the curriculum change during this journey (providers of all DT&HM and all PLD, subject associations, peak bodies, education agencies, ICT industry).
- k. Continuing to monitor and evaluate the implementation, and reset priorities where necessary.
- l. Ensuring our communications are proactive and clear on what we expect schools and kura to be teaching and strategically prioritising in 2020, and the years that follow.

Key Risks and Benefits

- 18. There is no major risk associated with this briefing.

Financial Implications

- 19. In 2020, we will continue to support schools and kura to implement the new curriculum content via the remaining support package budget.
- 20. To ensure all students in years 1-13 are being provided with DT&HM learning opportunities beyond 2020, further investment may need to be considered as we monitor the demands for support. Financial implications for this will be considered as part of the Curriculum, Progress and Achievement wider education work programme through Budget 2021.

Proactive Release

21. We recommend that this Briefing Note is proactively released as per your expectation that information be released as soon as possible. Any information which may need to be withheld will be done so in line with the provisions of the Official Information Act 1982.

Proactively Released